SEPTEMBER 1, 1958

PURCHASING

The Methods and News Magazine for Industrial Buyers

BUSINESS DISHONESTY

How Do Purchasing Ethics
Measure up?

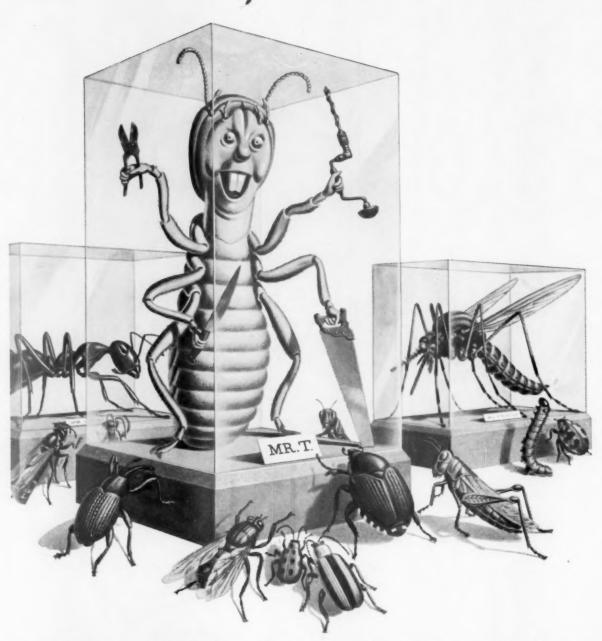
The General Problem of Ethics Leading P.A.'s Speak Out A Sale Manager Sounds Off And Special Opinion Poll

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The case of the champion home-wrecker

M_{R. T.} ("t" for termite) with his timber-gnawing habits will damage American homes to the tune of millions and millions of dollars this year.

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 What self-locking fastener would you

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A log jam every minute dumped on rubber

B. F. Goodrich improvements in rubber brought extra savings

Problem: Those logs are on their way to being paper. After the bark is removed, the logs are dumped on a moving rubber belt—edgewise, endwise, flat, anyway they happen to tumble from the debarking drum. Keeping this wood on the move used to be quite a problem in paper mills. The huge logs hit the conveyor belt with such force that the rubber would be cut, the fabric weakened. Before long belts were torn to shreds.

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B.F.Goodrich industrial rubber products

Millions of operating dollars are waiting to be saved

(by plant managers who adopt organized lubrication)

Concept of Organized Lubrication to save cash in 5 areas of plant operation is proving to be a most fertile field for plant-wide cost control. Two reports now available from Texaco on opportunities, methods, case histories.

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The entire July, 1958, issue of Lubrication magazine is devoted to "Organized Plant Lubrication." The statement above summarizes the issue's findings.

In effect, this and other writings on the subject reflect the fact that here is a relatively new and certainly fertile field for real cost savings in plant operations.

There's enough evidence in to cause excitement among the experts. Among the experts are the men who are putting Organized Lubrication to work—the plant managers and their team of engineers.

For, in assuming the large burden of satisfying the corporate measure of profit and loss on their units, plant managers have been quick to adopt new concepts and practices that result in plant-wide savings, such as planned overhaul, professionalized purchasing and organized quality control.

Most of these have been cost-controlling programs. So is Organized Lubrication. From the evidence in so far, this can prove to be one of the most fertile of the new plant managing practices.

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Let's acknowledge now that lubricants alone, no matter how excellent, are not the secret; rather, it is the setting of goals, the organizing of methods, and the expertness of men who can combine a knowledge of this new opportunity with an understanding of plant practices and lubrication.

In plants throughout the country

Texaco's planning book has been studied and put to use. Some large corporations have adopted its recommendations on a staff level, or have set up committees to study the subject. Many plant units report savings from 10 to 100 times the cost of the lubricant used!

If you are a member of a plant operating group, or if you are concerned with cost control in many plants, you will find this subject well worth an introductory 10 minutes or so.

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PURCHASING

The Methods and News Magazine For Industrial Buyers

SEPTEMBER 1, 1958 VOLUME 45, No. 5

B. P. MAST Chairman of the Board B. P. MAST, JR.

RAY RICHARDS Publisher

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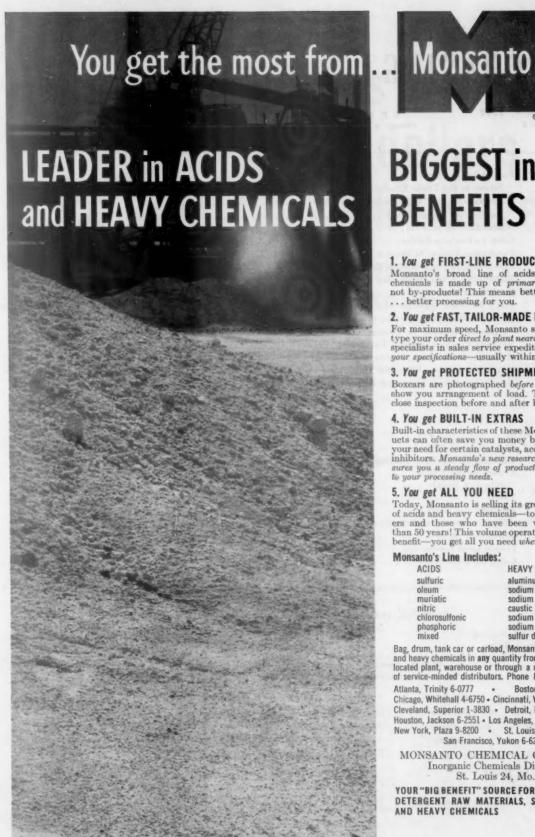
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Purchasing Previews

Straws in the Trade Wind

- ▶ BUSINESSMEN MORE OPTIMISTIC—A fourth quarter business surge is expected by the majority of business executives surveyed by Dunn & Bradstreet. Fifty-five percent of the businessmen believe sales for their own companies in final quarter '58 will be greater than in the same period in '57. This is a marked improvement over D&B's previous survey which showed that only 41% thought third quarter sales would top year-ago figures. Most optimistic are durable goods manufacturers with 60% anticipating a sales increase in the final three months.
- by sou hear large companies complaining about unfair competition from price-cutting small firms. The big companies' beef is this: they spend millions on research and development only to have their new products copied by smaller companies. Since the small companies have no investment in research, they can usually shave prices. The large companies say this is a dangerous trend. They feel there must be adequate reward for research if this type of work is to continue. The large companies are trying to convince the P.A. that in the long run he'll gain most by sticking with suppliers who spend a lot on research—even if he has to pay slightly higher prices.

For the P.A.'s Hot File . . .

An exciting and vitally important economic change is now taking place. It looks as though we are shifting inventory policy—from cutback to buildup. Significance of this trend can't be overstated. Through first half '58 we were cutting inventories at a \$9.5 billion per year rate. It now appears likely that we'll be adding to stocks at a \$3 billion per year clip by first quarter '59. The effect of this change is much the same as if the government suddenly decided to go on a \$12.5 billion pump priming spree.

- PAPERWORK SHORTCUT—Do you place a lot of repetitive orders with the same vendor? Well, here's a technique that may save you time and money in preparing purchase orders—at least it's paying off for one major metalworking company which has been able to cut the time needed to make out a purchase order from six minutes to two minutes. Here's how the system works:
- (1) Vendor's name, address and description of a group of repetitive items are pretyped on



New orders for industrial supplies and machinery continue to improve. The latest American Supply & Machinery Manufacturers' index, which reflects new orders for production tools, equipment and supplies placed by industrial distributors, is 164, a gain of 12 points or 7.9% from the previous month.



Symbol of a reputation for integrity, quality and service—for advanced creative engineering achieved by New Departure in over half a century of precision ball bearing manufacture.

1200% GAIN IN GYRO ACCURACY WITH NEW DEPARTURE BALL BEARINGS!

A major advance in gyroscope construction by Sperry Gyroscope Company results in a remarkable reduction of random drift rate. Involving a special design of gimbal bearings, rates of 2 to 3 deg. per hour, recently considered very good, are now cut to as little as 0.25 deg. per hour with still lower rates in sight.

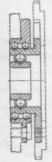
New Departure created the special manufacturing techniques for the high-



Sperry C-11 Gyrosyn_® Compass with Rotorace bearings will give ultra-precise navigation to the new jetliners.

precision production of unique ball bearings—another indication of New Departure's ability to meet exacting instrument bearing requirements thru wide engineering experience and precision manufacturing facilities.





The Sperry Rotorace (TM) Gyroscope employs two bearings, one concentric within the other. One outer race is fixed to the gimbal frame, while the other carries a light gear by which it is rotated in periodically alternating directions.

In addition to reducing random drift due to any microscopic irregularities or possible foreign particles, rotation of the bearing race also reduces bearing static or break-away friction.



EPARTURE

DIVISION OF GENERAL MOTORS, BRISTOL, CONN.

NOTHING ROLLS LIKE A BALL

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Straws in the Trade Wind

a special duplicating paper called a film master.

(2) Additional information such as the P.O. number, quantity, date, routing, etc. are entered on the film master in pencil.

(3) When a requisition comes through for some of the repetitive items, the film master is run through a duplicating machine and out comes a purchase order on a special sensitized paper. Items on the film master that are not needed can be crossed off the purchase order.

► RENEGOTIATION AND PURCHASING—
The U.S. Chamber of Commerce is using purchasing experience as one of its arguments in recommending an end to the Renegotiation Act.
The Chamber points out that when the Act was passed the military had little experience in large volume defense purchasing. Now, however, the Defense Department has had 17 years to sharpen its buying tools. "It has improved its repricing techniques and refined its purchasing methods to eliminate excessive profit," says the Chamber. "Renegotiation is no longer necessary."

► PINPOINTING THE TROUBLE SPOTS—Industrial production is at its highest since January. Personal income just set a new record. Housing starts are the greatest since January, 1956. And there are many other indicators that

business is definitely on the upturn. However, there are still a number of important economic statistics which as yet don't reflect the business improvement. Specifically: Retail sales have held at the same sluggish level for the last three months. July volume was almost 3% below the July '57 figure, And unemployment—though dropping—hasn't improved as much as it should at this time of the year. Another weak spot: installment credit, which dropped for the fifth month in a row.

- ▶ PROFIT PICTURE PROMISING—Early reports on second quarter business profits are encouraging. Earnings in the April-June period held at the same level as in the first three months of the year. A decline had been expected. As a result, it now seems reasonable to figure that profits will increase during the third quarter.
- PAPERBOARD POINTS THE WAY—You have to pack it to ship it. That's why paper-board statistics are a significant economic indicator. Right now the statistics are pointing to a definite pickup. Demand for paperboard by corrugated box manufacturers is running 12% above year-ago figures. Another market indicator: price of waste paper used to make paperboard recently rose \$2 a ton.



Roy L. Reierson

QUOTE!

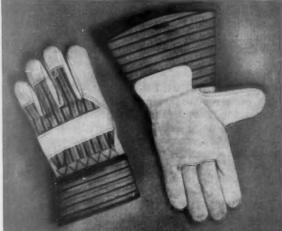
Inflation, not recession, has again taken over as the main concern of economists and government officials. However, one informed source who takes a less-than-panicky view of the inflation threat is Roy L. Reierson, vice president, Bankers Trust Company. Says Mr. Reierson: "Unless the United States adopts fiscal irresponsibility as a way of life, or, of course, we become involved in another war, an inflationary binge appears unlikely. Over the years those countries that have experienced really acute inflationary pressures have been countries that have consistently run substantial deficits which were financed either by an increase in the currency or with the direct help of the central bank.

"The record of the United States in fiscal matters, although admittedly not all that it should be, offers little ground for acute concern on this score."

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Special Industry Report:



- Congress Kills Subsidy
- Stocks Heavy, Demand Low
- Future Aid Likely

N THE pre-adjournment rush, Congress found time to squelch what had become the main hope of domestic lead and zinc producers. It killed the controversial \$458 million minerals subsidy program. The government would have commenced a five-year program which would have given price supports of 2.9 cents per pound for zinc and 3.9 cents for lead. Proponents of the bill claimed it would-unlike stockpile buying or higher tariffs-permit zinc and lead prices to be determined freely in the open market by forces of supply and demand. There was just one hitch: Uncle Sam would have to pick up the tab for the

subsidy. And Congress — faced with a \$12 billion deficit — just wasn't in the mood.

What's Next?

Had the bill been passed, the P. A. could have looked for slightly lower lead and zinc prices. Domestic production would have been stimulated by the subsidy. Assuming that lower prices did not significantly curtail foreign output (this would be true over the short term certainly) supply would increase. This, in turn, would cause the price to drop.

Over the longer term—and this was the main hope of the subsidy bill's proponents — the lower prices of lead and zinc would have their effect on both consumption and on imports. Consumption would be stimulated by the lower prices; both lead and zinc would be more competitive than before. Despite higher con-

sumption, presumably imports would taper off since prices in the American market would be less attractive to foreign producers. The end result would be greater domestic production than ever before and full employment in the mining areas. Over the five year period, the realignment of international trade caused by the drop in lead and zinc exports to the American market might be such as to permit the ending of the subsidy without fear of unemployment in American mines. But. if the history of subsidies is any criterion, this is probably wishful thinking.

Tariffs or Stockpiling

It seems very unlikely that the zinc and lead buyer will continue to get a completely free market. Some sort of government action is almost inevitable. The alternatives to a subsidy are higher tariffs



Special Industry Report:

or stockpiling. With a tariff, the government gains a little bit of revenue. Domestic producers are sheltered from foreign competition. The only rub is that domestic consumers of lead and zinc pay higher prices and their consumption of the metals is reduced.

A stockpiling program also raises prices of the metal and world production is stimulated by the buying. Both foreign and domestic producers benefit from such a program; consumers, as with a tariff, feel the higher prices. Stockpiling can be more expensive than a subsidy program since the government must actually buy the metal rather than just pay a few cents a pound in subsidy. But, of course, the government does actually own the metal and presumably it can always be re-sold whenever there is a national emergency or when there is a strong inflationary demand that pushes up prices.

Buyers' Viewpoint

Naturally all forms of government interference with the free market costs buyers moneyeither in the form of higher prices for the metals or as taxpayers if federal treasury pays subsidies or buys for the stockpile. This is why most buyers are probably against any sort of government interference with free market forces. However, there is undoubtedly considerable truth in the allegation by lead and zinc producers that a stable market for domestically mined metal is to the interest of both buyers and sellers. Certainly metals like aluminum and magnesium, with relatively stable administered prices have grown in favor at the expense of lead, zinc, and copper.

Market Risk

Every buyer of lead and zinc is a speculator regardless of whether he wants to be or not. The only way he can avoid speculating is to carry no inventory. And this is impossible with all

but the most elementary production processes. The prices of both are traditionally extremely sensitive to relatively small changes in the supply-demand equilibrium.

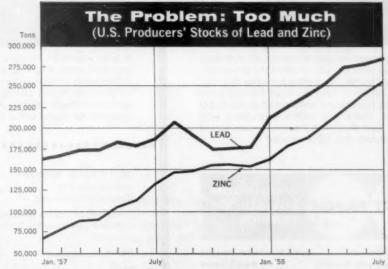
The 1953-54 recession is the most recent example of their sensitivity. Industrial production dropped off about 12% during this period. But look what happened to lead and zinc prices. From its peak of 171/2¢ reached in June, 1952, prime western zinc tumbled nearly 50% to a low of 91/4¢ in February, 1954. The drop in lead prices was almost as spectacular. They tumbled from their Korean peak of 19¢ to 121/2¢ in February, 1954. These price swings took place despite artificial demand generated by purchases for the strategic stockpile which were made throughout this period.

Because of their price volatility, any buyer who must hold large stocks of lead or zinc can either lose his shirt or make a lot of money on his inventories. Fortunately, for the user who doesn't want to speculate or can't afford to, there is a way out. He can

hedge on the commodity exchange. That way he can guarantee that he will lose no money on his inventory—nor will he make any. The process is relatively simple.

Suppose, for example, a buyer has 1000 tons of lead in inventory that he purchased for 10¢ per lb. If the price drops to 9¢ per lb. in the next six months, the buyer will have lost 1¢ per lb. (\$20.00 per ton) on his inventory or a total of \$20,000. But if the buyer sells a future contract for 1000 tons when the market is 10¢, he won't lose anything other than a modest brokerage commission. If the market drops to 9¢, his inventory loss will be exactly offset by his gain on the future contract. If the market goes up, his loss on the futures contract will be exactly offset by his gain on his inventory.

There are many purchasing agents who don't hedge their purchases when they think they know which way the market is moving. And many of them make substantial profits for their companies through judicious investment in inventories.



The lead and zinc industries have a common problem: overproduction. Producers' stocks of the two metals are at the highest level in years. Lead stocks exceed 276,000 tons; those of zinc are over 252,000 tons.



Earl Henderson, Assistant Cashier and Superintendent of Buildings for The Philadelphia National Bank, and John Kennedy, Main Office Building Supervisor, check the comfortable new officers' lounge. Says Mr. Henderson: "This room is part of extensive bank remodelling aimed at giving the public modern, efficient facilities and employees cheerful, comfortable working conditions."



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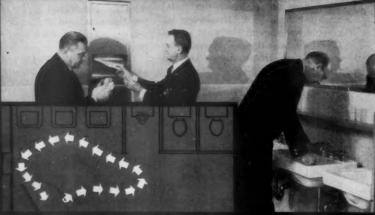
About 225 employees use the cheerful, efficient washroom-lounge facilities, part of which are shown here in the ladies' lounge, "The entire bank was re-done," says Mr. Henderson, "and of course the washrooms had to be as modern and well-planned as the rest of the project. That's why Scott's suggestions were welcomed. Scott Washroom Advisory Service worked with the architect. Results: excellent!"



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PURCHASING OPINION

Are Business Ethics Slipping?

Much of the recent news from Washington has dealt with ethics and moral values. Many in business have been quick to criticize government officials. But problems involving ethics are not restricted to government. They concern businessmen just as deeply—particularly purchasing agents because the nature of their job forces them to make decisions involving questions of ethics more often than perhaps any other group of business executives. To get the views of purchasing agents on the general state of business ethics, we surveyed a representative cross section of P.A.'s. These are the results of the survey:

1. Do you think there has been a decline or improvement in business ethics over the past few years?

No Change

P.A.'s who think there has been a decline in business ethics most frequently mentioned "increased competition," "breakdown of the moral code," and "unethical salesmen" as the causes.

Those who believe there has been an improvement mentioned "higher caliber purchasing executives," "better defined company policies," "efforts by N.A.P.A."

2. What do you think are the most prevalent abuses that might undermine public confidence in business as a whole?

Most frequently mentioned were: payoffs, bribes, lavish entertaining, lobbying, price fixing, unjustified price increases, false advertising, poor public relations.

QUICK CURE FOR

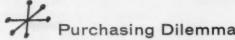




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CHAIN BELT WAREHOUSE



In a spot where you need plus service on chains ...sprockets...bearings...couplings...pulleys ...idlers? Having trouble with equipment that doesn't stand up...causes production hold-ups due to premature failures?

Here's the quick cure for that purchasing dilemma! Call your nearby CHAIN Belt Distributor. You'll find him ready, willing and able to serve you...a man of his word on deliveries and service.

Speaking of service, your CHAIN Belt Distributor is way ahead. Product quality? The best...it's CHAIN Belt's plus value! Personal service? The best! His men are trained in special factory schools to provide you unequaled assistance in selection and application help. Delivery? The best! His complete stocks are backed up by the regional CHAIN Belt warehouse. Your standard and emergency needs are served as you want them.

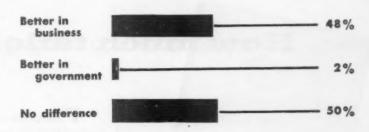
For the quick cure for P.D., call your CHAIN Belt Distributor. CHAIN Belt Company, 4670 W. Greenfield Ave., Milwaukee 1, Wis.

> In Canada, write CHAIN Belt (Canada) Ltd., 1181 Shappard Ave., East, Toronto, Ontario.

For More Information Write No. 163 on Inquiry Card-Page 32

Purchasing Opinion

3. In general, do you think there is any great difference in the "moral climates" of industry and government?



4. Do you think it is ethical:

a. for congressmen and other government employees to accept gifts from business firms? Yes (if modest) ______ 19%

No 81%

b. for purchasing agents to accept gifts from suppliers?



69%

5. Would you favor legislation to prohibit business gifts from being tax deductible?



No 61 %

6. Do you think it would be practical to draw up a general code of ethics for business to govern the giving and receiving of gifts and favors?



No 57%

How much tailoring does

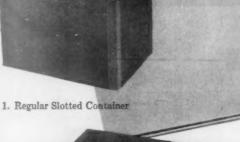
Picking the proper corrugated shipping carton is like buying a suit. Rarely will a ready-made, "off-the-shelf" unit fit perfectly. Some modifications usually are needed; possibly even a complete custom-built job. It all depends on your product and how it is normally handled and shipped.

You may find, for example, among the representative basic box types shown here one that's just right for you. Or perhaps further structural design work would enable you to ship more efficiently and economically.

Talk it over with your local Union Box representative. He's an expert at pin-pointing all the pertinent factors. And at recommending or helping develop the most practical box for your needs.

1. Regular Slotted Container

Probably the most popular type used today. Fits all standard automatic packing and sealing units. All flaps the same length; outer flaps meet in center. Single- or double-wall construction is used, depending on degree of



2. Special Flap Slotted Container



3. Half Slotted Container



4. Double Cover Box

your shipping container need?

protection your product needs.

Similar to the "Regular Slotted" is the "Center Special Slotted Container". Top and bottom areas are stronger; both inner and outer flaps meet at box center.

2. Special Flap Slotted Container

There are two kinds of "Special Flap" boxes. In one, the top and bottom flaps partially overlap. In the other (shown left) they overlap completely, providing double thickness at top and bottom. When strapped shut, flaps override each other, form snug, non-butting closure. If glued, adhesive covers full flap, assures extra safe, durable bond.

3. Half Slotted Container

Bottom is similar to Regular Slotted Container. Flanged cover is sent as a blank for set-up by shipper. Good as combination shipping shelf package. Without cover, used for batteries, other heavy, small items. Also, as a transfer file or stock box.

4. Double Cover Box

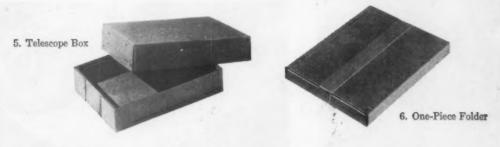
Ship heavy items where strapping is necessary? This three-piece box with telescoping covers might be just the ticket. Excellent stacking strength; strong covers take rough handling. Often used in large sizes for bulk packs on pallets.

5. Telescope Box

You'll probably need a box like this if you ship flat items such as paper, books, advertising material, etc. It protects with a double build-up of sheet around sidewalls and corners which also gives you maximum stacking strength. May be constructed as a full telescope (see below) or as a partial telescope.

6. One-Piece Folder

Another excellent shipper for books, catalogs, etc. Packs and closes quickly and easily. Mostly used for parcel post and express shipments. Also made up as "One-Piece Special Folder" where all flaps meet in center.





Write for new, informative booklet, "Types of Corrugated Boxes."

UNION BOXES

INION BAG-CAMP PAPER Corporation

233 BROADWAY, NEW YORK 7, N. Y.

Factories: Savannah, Ga., Trenton, N. J., Chicago, Ill., Lakeland, Fla.

Sales Offices: Eastern Division—1400 E. State Street, Trenton, N. J. Southern Division—P.O. Box 570, Savannah, Ga.; P.O. Box 454, Lakeland, Fla. Western Division—4545 W. Palmer, Chicago, Ill.

For More Information Write No. 164 on Inquir Card-Page 32

SPECIAL **FITTINGS** Need NOT **Delay You**

Midwest Can Make and Deliver

An exclusive and flexible manufacturing process enables us to make welding fittings of any material available in plate that can be worked and welded. As plate is more readily available than pipe, in special materials and thicknesses, deliveries are much better.

Elbows with special included angles, special tangents, special wall thicknesses and of special materials are easily and promptly made. Closer tolerances are inherent in the Midwest process. Quality control aiways exceeds code requirements ... can be as comprehensive as you need.

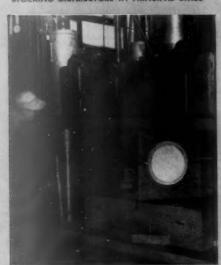
Whether or not you use specials, Midwest Welding Fittings will do a better job for you. Consult your distributor, or write us for new Bulletin 5801.

MIDWEST PIPING COMPANY, INC.

Main Office: St. Louis 3, Mo. (P. D. Box 433) PLANTS: ST. LOUIS, CLIFTON, M. J. and LOS ANGELES

PLANTS ST. LOUIS, CLIFFON, IN . J. and LOS ANGELES
Asheville, (Box 446, Skyland, N. C.) - Atlanta 9—72 11th St., M. E
Boston 27—426 First St. - Chicago 3—79 West Moorco St
Leveland 14—616 St. Clair Ave. - Houston 2—1213 Capitol Ave.
Los Angeles 33—520 Anderson St. - Mismi 34—2103 Le Jeune R
Hew York 7—50 Church St. - Pittburgh 19, Pa.—437 Grant St
St. Louis 4, Mo.—3660 South Second St.
Tulsa—1860 E. 21st St.

STOCKING DISTRIBUTORS IN PRINCIPAL CITIES

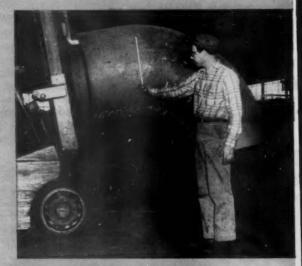


 18° 0.D. x 14° wall 90° elbows (24% chrome 4% moly) being sized in compression by totally enclosing dies. The exceptional dimensional accuracy that results is possible only with the Midwest process.



Entire interior and exterior surfaces of special stainless elbows for nuclear power plant are inspected with dye penetrant in search of microscopic surface imperfections. Elbows are 16" O.D. with 102° included angle and long tangent on one end.

Note the exceptionally long tangent on one end of this 36" O.D. 90° short radius elbow made of special carbon steel. Similar tangent could have been provided on other end if required.





Interior surface of 30" O.D. stainless steel welding elbow for liquid sodium nuclear system required a finish of 125 micro-inches or better.

8060



IMPROVE PIPING DESIGN and REDUCE COSTS

Is your shipping dollar

being TAKEN FOR A RIDE?

Don't be misled by so-called "bargain rate" airfreight and truck carriers. You may find you're paying *higher* minimum charges and getting far *less* service. Compare these Railway Express advantages before you ship with any other carrier.

HERE ARE DOWN-TO-EARTH FACTS ON RAILWAY EXPRESS SERVICE

Widest Coverage—Railway Express serves some 23,000 communities to give you mass distribution—with one company responsibility. You can reach every major market in the U.S., and with Railway Express International Service—most every major market abroad. No more worries about delays and divided responsibility in transferring between two or more carriers.

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THE BIG DIFFERENCE IS RAILWAY EXPRESS

←For More Information Write No. 165 on Inquiry Card—Page 32 SEPTEMBER 1, 1958

For More Information Write No. 166 on Inquiry Card-Page 32

21

FOR 5 YEARS

the time-tested world standard in resistance alloys

Nichrome*

made only by Driver-Harris

On August 11, 1908, the trademark NICHROME for Resistance Wire was registered in the United States Patent Office.

Today, after a half century of world wide recognition and use, Nichrome is <u>still</u> the accepted standard of quality in electrical resistance alloys.

Of the 132 special purpose alloys now produced by Driver-Harris for the Electrical, Electronic and Heat Treating Industries, Michrome is the most famous . . . and it is made only by Driver-Harris.

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MAKERS OF THE MOST COMPLETE LINE OF ALLOYS FOR THE ELECTRICAL, ELECTRONIC, AND HEAT-TREATING INDUSTRIES



For More Information Write No. 167 on Inquiry Card-Page 32

Washington Report

Inflation Is Again The Major Concern

NFLATION HAS again become the key word in the economic cycle. Costs and prices did not go down in the recession. There were too many built-in price props.

Wage levels continued to go up—with many union contracts providing for an automatic increase, recession or no. With some unions getting automatic boosts, others were in a strong position to bargain for increases.

Net result is that the index of wholesale prices is currently higher than it was last year. There have been drops in some prices, but the general direction has been

Confidence Keyed to Consumer

Surge of confidence ir. business prospects rests largely on the consumer, who has been buying in quantities comparable to last year's peaks.

Personal consumption expenditures have been rising, and are close to record levels. Government buying—federal, state and local (exclusive of military)—has been going up.

Only capital investment by industry has continued at a lower level—and analysts are watching this sector closely to see if business confidence will start activity in plant and equipment buying.

Only really weak area continues to be unemployment. No quick cure is seen for this problem. Even though industrial production will increase, the number of recalls to the work force will not be startling. Improvements in productivity which have been obscured with the drop in business activity will become clearly apparent.

Defense Buying Poses Purchasing Problems

PRESSURE FOR an arms buildup goes on side by side with pressure for military disarmament, with one having little effect on the other. For the military

buyer—and the PA in the chain of supply that feeds into the military product—the situation is confusing.

More immediate to the buyer's interest, and roughly in the order of importance which they assume are (1) money, (2) technological problems and (3) high costs.

So far as money is concerned, the lesson of '56-'57 should be helpful to both government and industry. The military overspent its funds, and when contractors made deliveries of hardware to the military and asked for payment, they found the till was empty.

This led to stretchouts in delivery and stalling of payments to contractors on items for which they had already made disbursements.

Have Money In Hand

To avoid such pitfalls, the Department of Defense Comptroller is insisting on better planning by the military procurement services. The policy is described in general as "full funding", which means, more or less, that the military services should have the money in hand to pay for the hardware which they are buying.

It is not always possible to estimate how much will be needed when the item being bought is experimental and where it might take one, two or five years for delivery depending upon how the development work goes. So in this area, the objective is hardly to have all the money in hand, but is pointed toward better management both on the part of the military buyer and his counterpart in industry.

Problem for P.A.'s

Problems arising from advanced technology have always complicated the PA's life. Where the materials and components are changing there is no good index on what and how much to buy.

The military has the same problem with the whole complex of buying hardware for ballistic missiles, for space exploration, for all

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- Non-marking
- Quieter rolling
- Will stand temperatures up to 200° F.
- High impact strength
- Resist oils, greases and most chemicals
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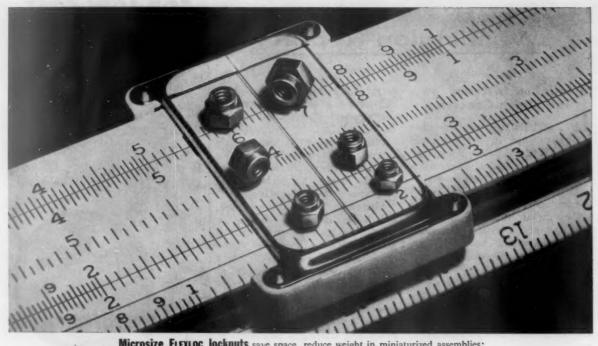
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DOWNEY (LOS ANGELES COUNTY) CALIFORNIA

60 WALKER STREET, NEW YORK 13, NEW YORK
36 NORTH CLINTON STREET, CHICAGO 6, ILLINOIS

For More Information Write No. 168 on Inquiry Card—Page 32



Microsize FLEXLOC locknuts save space, reduce weight in miniaturized assemblies; eliminate need for auxiliary locking devices; help increase overall product reliability.

Microsize FLEXLOC Locknuts Help Reduce Costs of Fastening Small Assemblies, Simplify Inventory

	Across Flats		Hex. Height	Across Corners	Height
SIZE	MAX.	MIN.	REF.	MIN.	REF.
0-80 NF-38	.111	.107	.046	.121	.075
1-64 NC-38	.127	.123	.056	.140	.090
1-72 NF-3B	.127	.123	.056	.140	.090
2-56 NC-38	.158	.153	.067	.176	.105
2-64 NF-3B	.158	.153	.067	.176	.105
3-48 NC-3B	.190	.183	.071	.210	.120
3-56 NF-3B	.190	.183	.071	.210	.120
4-40 NC-3B	.190	.183	.071	.210	.120
4-48 NF-3B	.190	.183	.071	.210	.120

Specifications. Available in alloy steel (plain or cadmium plated) for temperatures up to 550°F; in 18-8 stainless steel (silver plated) for temperatures up to 750°F; and in brass (plain or cadmium plated) and aluminum (plain or chemically treated) for temperatures up to 250°F.



At SPS we apply a dynamic standard of quality—continually refined —so that our fasteners

will always have the high reliability factor required by today's faster speeds, higher temperatures, and greater dynamic stresses. By using SPS fasteners in your assemblies, you increase overall reliability—the certainty of predictable performance under actual service conditions.

For more information on the full meaning of reliability, write for a copy of the new SPS booklet "High Reliability."

Microsize FLEXLOC self-locking nuts are designed to save space and reduce weight in mechanical and electronic equipment, instruments, servomechanisms, and other small devices in which weight and bulk are important design considerations. These tiny precision nuts have exceptional strength and locking power; increase fastening reliability in all types of miniaturized assemblies.

Microsize FLEXLOCS have the same advantages as larger FLEXLOCS. One-piece, all-metal construction... nothing to put together, come apart or get lost...no wiring, jam nuts or cotter pins...no nonmetallic inserts to come out or deteriorate. They facilitate design, save assembly time, simplify inventory, help cut fastening costs wherever they are used.

You can use Flexlocs as locknuts or stop nuts. They lock at whatever point wrenching stops and will not shake loose. They are impervious to moisture, dryness, oil or grease. They can be reused many times without loss of locking action. See your authorized SPS distributor for more information on microsize Flexloc locknuts (and microsize Flexloc self-locking clinch nuts). Or write us for literature and samples. STANDARD PRESSED STEEL Co., Jenkintown 31, Pa.

We also manufacture precision titanium fasteners write for free booklet



Jenkintown · Pennsylvania

Standard Pressed Steel Co. • The Cleveland Cap Screw Co. • Columbia Steel Equipment Co. • National Machine Products Co. • Nutt-Shel Co. • SPS Western • Standco Canada Ltd. • Unbrako Socket Screw Co., Ltd.

Washington Report

the items that are going into the modern arsenal.

Problem basically is that so many of the items being bought now are in this category and that each item is so expensive. This is where the military is under pressure for economy.

We Can Spend More

On one point there is general agreement. Spending for arms will go on at a high level, and the nation can afford not only the present rate of spending, but greatly increased defense spending.

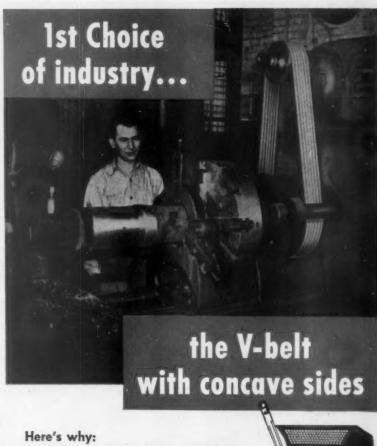
There have been several reports on how much the government could spend for arms. An official report—the Gaither Report—indicated that we could and should step up military spending.

Shortly after this report leaked out, a Rockefeller-supported study suggested that military spending be increased sharply over the next several years, and more recently the Committee for Economic Development released a report which indicated that defense spending of between 10 and 15 percent of the gross national product does not threaten the economic soundness of our system.

Assuming that the projection of defense needs and ability to sustain them is correct, the drive towards efficiency and economy will continue. All the Department of Defense is trying to do is to make its contractors and vendors as economy conscious as they can.

One way to do this, according to top military procurement policy sources, is to have the supplier shoulder some of the risk. By having the contractor take a bigger share of financing government work, the Department of Defense feels that industry purchasing agents will watch their inventory position much more closely.

Aside from the money that "excessive" inventory can tie up, the military is thinking in terms of the experimental nature of the present day product. Obsolescence comes so fast in the new technologies it tends to outweigh the economies of mass purchase.



Here's why: The Concave Sides of Gates V-Belt insure longer life...lower costs

Try this. Bend a Gates V-Belt as if it were going around a sheave. Feel how the concave sides (Fig.1) fill out... become straight (Fig.1A). This precise fit insures full contact with the sides of the sheave...grips the sheave evenly, distributing wear uniformly across the sides of the belt. Uniform wear lengthens belt life.

Make the same test with a straight-sided belt (Fig. 2). Feel how the sides of the bent belt bulge out, concentrating wear at points shown in Fig. 2A. Uneven wear shortens belt life; increases costs. Fig. 1-A

NO. 18136981

Because Gates V-Belts with Concave Sides are so universally preferred, they are also the *most widely available*. Gates V-Belts are carried by leading distributors in industrial centers throughout the world.

The Gates Rubber Company, Denver, Colorado



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Grinding and Retary Filing in Magnesium Division

> ZYGLO Inspection



production facilities for ALUMINUM and MAGNESIUM sand, shell and permanent mold castings UP TO 25 LBS.

also Iron and Semi-Steel Castings UP TO 100 LBS.



- three modern plants
- skilled personnel
- a fine reputation



WILLIAMS Co. RAVENNA, OHIO

More than a century of foundry experience

Here Experience Counts

Sure, sometimes luck helps out a fisherman ... but in the long run it is experience that pays off. And it is experience that pays off when it comes to solving power-drive problems for appliance and equipment manufacturers . . . the kind of experience Emerson-Electric offers you.

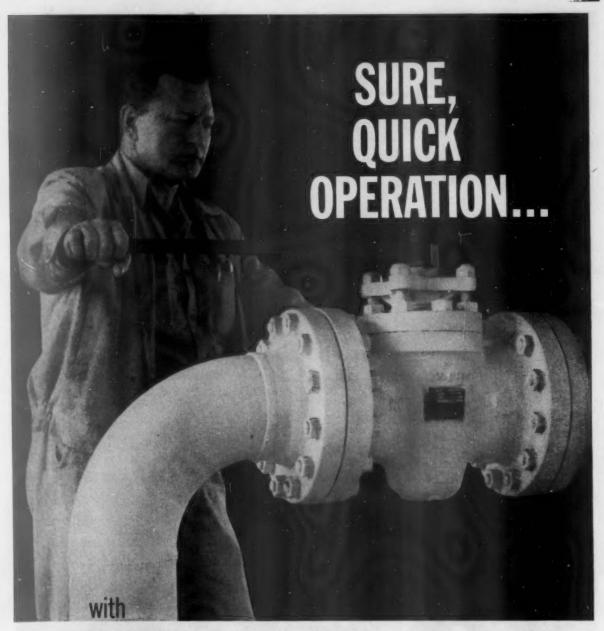
Remember..

- Emerson-Electric produces custom-engineered motors to suit your specific needs.
- Emerson-Electric has more than 100 engineers for on-the-spot service for you.
- Emerson-Electric has more than 65 years' experience in solving motor-drive problems like yours.

EMERSON-ELECTRIC of St. Louis - Since 1890



To get the kind of experience that counts, call, wire or write Dept. M-332 today. The Emerson Electric Mfg. Co., St. Louis 21, Mo.



WALWORTH LUBRICATED PLUG VALVES

Where closures must be 100% tight, where operation must be quick, where minimum maintenance is a must, Walworth Lubricated Plug Valves should be your first choice. Tight: because the lubricant seals the valve against leakage. Quick operation: a quarter turn of the plug opens or closes the valve.

Fast: easy lubrication either with Walworth's highpressure Lubricating Gun, or by manually inserting stick lubricant; the valve is easily serviced, even under pressure. Downtime is avoided. For complete information see your Walworth Distributor or write Walworth direct.



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You can CUT YOUR COSTS with these new and improved

CLEVELAND TOOLS

The Cleveland Twist Drill Co., with its more than 80 years of experience and "know how", is constantly working on new developments and improvements to keep pace with modern metalworking techniques. Every tool, designed and manufactured to the same high standards which have made the familiar trademark famous, will give you more production per dollar. For complete information, contact our nearest Stockroom or ...

TELEPHONE YOUR INDUSTRIAL SUPPLY DISTRIBUTOR



MO-MAX T-Shaped Ground Cut-off Blades

These improved blades are available in MO-MAX or MO-MAX COBALT High Speed Steels, heat treated to produce more cuts per grind. Head and body are ground to close tolerances, resulting in accurate uniformity and reduced set-up time.



Split Sleeves for Straight Shank Drills

The hole in these high quality sleeves is concentric with the body, assuring less run-out at the drill point, longer tool life and better holes. Used with tanged straight shank drills, you get more flute length at lower cost.



MO-MAX Hardened and Ground Drill Blanks

New Drill Blanks—hardened all over, and ground without back taper. Wire gauge, letter and fraction sizes, No. 80 to ½ inch, singly or in sets. Useful for making punches, tool bits, countersinks, boring tools, burring tools, etc.



Carbide Die Drills for Hard Steel

For drilling hardened steel in the range of 48 to 65 Rockwell C. Holes may be drilled without annealing or appreciably changing the structure of the material. Can be used with or without coolant.





Hy-Spiral Two Flute Double-end

Proper rake angles and cutting edge relief assure efficient milling in non-ferrous materials and in the harder alloys. Positive chip ejection . . . no build-up on the cutting face. Especially economical on long runs.



Heavy Duty with Duo-Drive Shanks

The 2 inch DUO-DRIVE shank fits the conventional two-set-screw-drive holder as well as the bayonet-lock type of holder. Heavy web construction, accurate machine-ground end-tooth notching and special surface treatment.



Two Flute Extra Long Ball-nose

They have the extra length for milling fillets and pockets which cannot ordinarily be reached by the conventional length end mills. With these center cutting end mills, the initial hole may be "drilled".



Two Flute Double-end Ball-nose

Machine-ground notch and ball end assure the easy removal of chips in deep slotting and pocketing operations, with the resultant savings realized in more material milled per grind. Economical on production runs.



500 SERIES Four Flute Center-cutting

Now you can get the plunge cutting ability of a two or three flute end mill with the finer finishes and better size control that are possible with a four flute end mill. Made with square nose or ball nose.



THE CLEVELAND TWIST DRILL CO.

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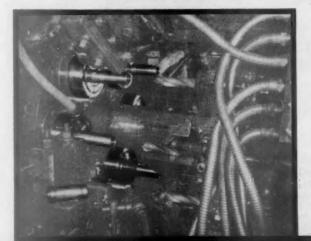


When Ordering Automatics

Specify HARDINGE Style "S" Sure-Grip Master Collets and Pads

and Pade Pade "B" Master Feed Fingers and Pads





Your automatics perform best with HARDINGE Master Feed Fingers and Master Collets. The name HARDINGE is your guarantee of accuracy and durability . . . allows you to reap the full benefit of the inherent accuracy of your machines.

HARDINGE Master Collets are the only masters with no work pressure on the screw . . . last longer . . . retain accuracy.

HARDINGE Master Feed Fingers and Pads save 30% to 80% over conventional solid feed fingers.

All sizes for all automatics.

Prompt Delivery from these Stock Locations: Atlanta, Boston, Chicago, Dayton, Detroit, Elmira, Hartford, Los Angeles, Minneapolis, New York, Oakland, Philadelphia, St. Louis, Toronto and Montreal.

BROTHERS, INC., ELMIRA, N. Y. HARDINGE "PERFORMANCE HAS ESTABLISHED LEADERSHIP FOR HARDINGE"

SIMONDS ABRASIVE CO.

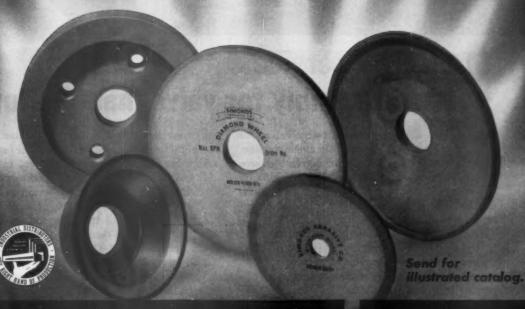
THE COMPLETE LINE IN EVERY RESPECT

Man-Made or Natural Diamonds

All standard shapes, sizes, diamond depths and concentrations... man-made or natural diamonds in resinoid and vitrified bond. Natural diamonds also in metal bond.

The new "man-made diamond" wheels, especially popular for grinding cemented carbides, average up to 35% more efficiency on the basis of cubic inches of carbide removed per cubic inch of wheel wear.

Specify "man-made diamonds" from SIMONDS... and get the best in diamond wheels for carbide tipped tools, chipbreakers; electrolytic grinding, surface grinding, lapping and hand honing.

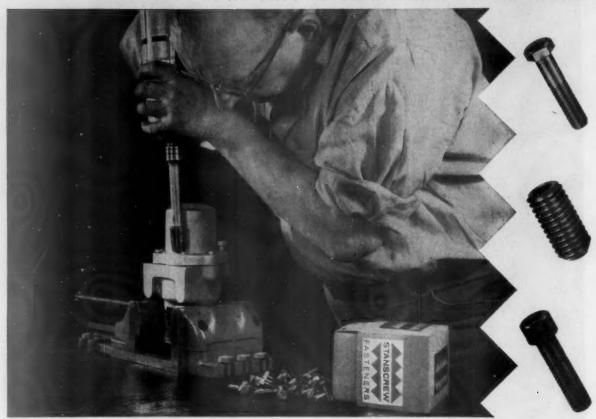


SIMONDS ABRASIVE CO.

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DIVISION OF SIMONDS SAW AND STEEL CO.
BRANCHES: CHICAGO + DETROIT + LOS ANGELES + PHILADELPHIA
PORTLAND, ORE. + SAN FRANCISCO + SHREVEPORT





Stanscrew service cuts rejects, speeds assembly for valve manufacturer

A prominent manufacturer of 4-way valves for freon was having trouble on his assembly line. His fasteners, tightened to an extreme degree to prevent seepage of the gas, were breaking on too many occasions. This meant complications in assembly and a high reject rate—which increased production costs substantially.

One of Stanscrew's fastener specialists, called in by a Stanscrew distributor, quickly found the answer. He recommended a standard cap screw and had staff engineers work out the precise torque which should be applied to insure a complete seal at all gaskets, yet eliminate any possibility of fastener breakage. By following these recommendations, the manufacturer has eliminated the problem of fastener breakage. and substantially reduced his reject rate.

Stanscrew offers over 4,000 standard fasteners . including a complete selection of socket, set, and cap screws. All are produced under rigid quality control methods and incorporate the lessons learned during 85 years of fastener manufacture. All 4,000 are always in stock and quickly available.

For the answer to your fastener problem, call your Stanscrew distributor. He will have a Stanscrew fastener specialist promptly study your operation and make specific recommendations.



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For More Information Write No. 177 on Inquiry Card-Page 32



WORK GLOVES REINFORCED WITH DU PONT NYLON OUTLAST OTHERS 2 TO 1! Here's proof: Work

gloves reinforced with 50% Du Pont nylon in the wearing surface* were tested side by side with ordinary cotton Canton flannel gloves in rugged wear tests. They lasted 2.2 times longer-saved 45% in replacement costs! Make sure your gloves are built to last . . . order nylon-reinforced work gloves when you buy. E. I. du Pont de Nemours & Co. (Inc.), Textile Fibers Department,

Wilmington 98, Delaware. *Higher percentage of nylon may give even greater durability, as indicated by laboratory data.

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YOUR STEEL SERVICE CENTER



COLD FINISHED BARS

readily available from your Steel Service Center, help keep your inventory costs down, avoid production delays, and free your capital for more productive uses.

Have you learned the BIG LESSON from this recession?

It's expensive to tie up capital and space in steel stocks! When orders fall off, your cost of ownership—interest, space rental, maintenance, and insurance—continues.

This kind of expense for cold finished bars can be eliminated—or at least reduced substantially—by taking planned advantage of the services of your local Steel Service Center, your nearest distributor stocking steel products.

Virtually every steel buyer thinks of his Steel Service Center in an emergency—and this is fine. But even bigger returns may be realized by taking *planned* advantage of your Steel Service Center for your routine purchases.

Your distributor of cold finished bars has a wide variety of shapes, grades and sizes available for prompt delivery, and specialized cut-to-order service takes only a little longer. Plan to use *his* space for your steel stocks, *his* capital for inventory,

his equipment, and his prompt cut-toorder service—and production coordinated deliveries—for higher productive efficiency. Many others already do— American Steel Warehouse Association figures reveal that over 14 million tons of steel were handled in this manner in 1957.

Steel Service Centers are a vital segment of America's steel distribution system, and the distributor nearest you stocking cold finished bars can help you reduce the cost of your steel ownership. Call in his representative and get the full story on taking *planned* advantage of the services of his firm and its facilities. And ask him to show you the new ASWA slide film presentation, "George Wilkins Fights Back"; you'll find it both interesting and rewarding.

Jones & Laughlin Steel Corporation, Dept. 544, Three Gateway Center, Pittsburgh 30, Pennsylvania.



MATERIALS HANDLING EQUIPMENT is expensive—as is the skilled labor to operate it—but you can reduce these costs by taking planned advantage of the services and facilities of your nearest distributor of J&L cold finished bars.



EXACTING QUALITY CONTROL MEASURES assure superior finish, machinability, and uniformity in J&L's cold finished bars. Your J&L distributor has a wide variety of shapes, grades, and sizes available for prompt delivery.



Jones & Laughlin Steel Corporation

PITTSBURGH, PENNSYLVANIA

can reduce your production costs...

Ingersoll-Rand air compressors

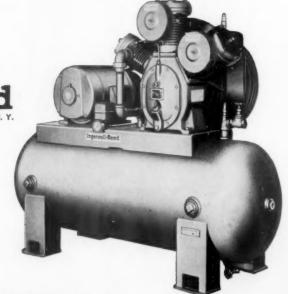
TODAY'S COST-CONSCIOUS PRODUCTION MEN are specifying Ingersoll-Rand Type 30 Air Compressors because no other compressor presents the same combination of features designed for economical, efficient operation.

Time-tested I-R engineering assures outstanding performance in every type of installation, reflecting the experience of more than 80 years. Like no other compressor, the Ingersoll-Rand Type 30 gives you year after year dependability with unmatched efficiency that delivers more air per horsepower.

Complete details are available directly from Ingersoll-Rand Company or your local Ingersoll-Rand Distributor.

Ingersoll-Rand
11 Broadway, New York 4, N. Y

Packaged air-cooled air compressors, ½ through 20 hp. other compressors to 6000 hp.



3-807

DOALL ECONOMY SPECIAL

Throw-Away Live Center

It's DoALL quality, DoALL laboratory-inspected, DoALL-priced!

Yet, this throw-away live center is yours for only \$19.50—less than you'd pay to replace just the worn bearings and cones of standard types. When your DoALL Center wears out, you replace it with a new one—and save! Pre-loaded, twin-row angular contact bearings carry thrust and radial loads. Three lengths: No. D-900-1, 4½ "O.A; No. D-900-2, 4½6" O.A; No. D-900-3, 5¾6" O.A. MORSE TAPER Nos. 1, 2 and 3.



Information For Your Catalog Files

PARKING LOT PLANNING

Parking techniques are discussed in a 32-page data book. Nineteen diagrams show space allocations for 3 parking angles—45°, 60°, and 90°. Minimum and optimum dimensions for each are given.

Harris Barrier, Inc.

Write No. 1 on Inquiry Card-Page 32

PARTS

A 224-page catalog describes and illustrates industrial parts and equipment. In addition, a large section provides full information on service and replacement products.

Electra Distributing Co.

Write No. 2 on Inquiry Card-Page 32

REFRACTORY CASTABLES

A 28-page, 2-color catalog deals with 15 specialized castable refractory cements. They were developed to meet need for materials that can stand greater furnace pressures and temperatures.

Mexico Refractories Co.

Write No. 3 on Inquiry Card-Page 32

ROLLING MILLS

Profusely illustrated in 3 colors, a 36-page catalog, FRM-58, gives specifications on a full line of mills for rolling ferrous and non-ferrous metals, as well as the new tough alloys.

The Fenn Mfg. Co.

Write No. 4 on Inquiry Card-Page 32

SALT BATH EQUIPMENT

Catalog No. 117 is a full guide to salt bath equipment and procedures. Technical data are supplied on austempering and martempering. Over 50 photos show on-the-job installations.

Ajax Electric Co.

Write No. 5 on Inquiry Card-Page 32

SCALE (BAGGING)

How materials packaged in open mouth paper or textile bags are quickly and accurately weighed with an automatic scale is explained in bulletin, No. 3749B. Photos show features of scale.

Richardson Scale Co.

Write No. 6 on Inquiry Card-Page 32

STEEL FRAMEWORK

Three steps in planning, cutting and joining steel framework are detailed in a 20-page catalog. How framework can be used for low cost construction of catwalks, storage racks, etc., is shown.

Republic Steel Corp.

Write No. 7 on Inquiry Card-Page 32

SWITCHING REACTORS

Catalog S-10 (16 pp.) describes a full line of switching reactors. The units offer one-step, low-cost static control to industry for the first time. Reactors are adaptable to a-c and d-c use.

Control

Write No. 8 on Inquiry Card-Page 32

TOOLING SERVICE

Over 1000 contract tool and die plants in the U.S. and Canada are listed in a 76-page, pocket size directory. Specific products and services offered by each plant are detailed.

National Tool & Die Manufacturers Association

Write No. 9 on Inquiry Card-Page 32

TUBES

A 20-page booklet has been compiled to facilitate proper selection of Reliatron tubes for industrial and communication applications. Special sections deal with camera and radiation detection tubes.

Westinghouse Electronic Tube Div.

Write No. 10 on Inquiry Card-Page 32

VALVES (AIR)

A 108-page general catalog covers a complete line of air control valves. Four sections deal respectively with: (1) 4-way valves; (2) 2- and 3-way valves; (3) manual valves; (4) special valves.

Numatics, Inc.

Write No. 11 on Inquiry Card-Page 32

WIRE ROPE

Use and care of wire rope form text of a 36-page handbook. Book also explains how to select right rope for specific needs and methods of socketing. Hints are supplied on correct installation.

Wire Rope Corp. of America

Write No. 12 on Inquiry Card-Page 32

Ship via D-C

Ship via D.C

Ship via D-C

For Fast, Dependable Service, Coast-to-Coast . . .

Mark your Purchase Orders



Purchasing Executives...

... from coast-to-coast are finding out they can eliminate their shipping worries by marking orders "D-C".

D-C's direct, coast-to-coast motor carrier service assures you these benefits:

- D-CIS FASTER—One-carrier direct service from coast-to-coast.
 2-man sleeper cabs go straight-thru with no transloading—cuts 20% off running time.
- D-CIS SAFER—One-carrier responsibility from pickup to delivery assures safe arrival, speeds tracing.

D-CIS MORE DEPENDABLE—One-carrier control means experienced personnel, modern equipment and facilities all the way.

Join the ever-growing list of satisfied Purchasing Executives who have found the answer to shipping problems—specify the coast-to-coast choice for coast-to-coast service!

TERMINAL CITIES

Albany, New York. UN. 9-8416 Buffalo, New York. RE. 3910 Chicago, Illinois. LA. 3-7440 Cleveland, Ohio. SH. 9-1666 Colo. Springs, Colo. ME. 2-1486 Denver, Colorado. DU. 8-4567 Detroit, Michigan VI. 3-9505 IEvansville, Indiana. HA. 3-6487 Kansas City, Mo. ME. 6-1361 tlouisville, Ky. ME. 6-1561	Los Angeles, Cal
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OFF-LINE SALES OFFICES:

	**Indianapolis	
Atlanta	*Milwaukee	
Boston	Philadelphia	
Pinning Oli	to A Clean	

indianapolis
Milwaukee
Philadelphia
Portland, Ore.
Rochester, N.Y.

**Toledo
Washington, D. C.



STEP ACROSS THE NATION D-C



Never has to be removed from the line to replace the seat rings. For the first time in valve history, you can replace the seat rings in a renewable seat ring gate valve, under all normal conditions, in less than 10 minutes, using just a screw-driver, and with the valve body still installed in the line. It is simply a matter of removing the bonnet (easily accomplished with the Fairbanks two piece union bonnet construction) loosen the stainless steel retaining screws and lift out the monel seat rings from the body. The new seat rings slip into place and are positively secured again with the retaining screws.

Fairbanks new 200 pound steam working pressure gate valves, available in sizes ½" through 2" in the rising and non-rising stem construction, have been field tested for over two years under all conditions from steam to corrosive liquids and have proven completely satisfactory—absolutely dependable. Seat rings have been replaced in from 7 to 10 minutes from the time steam was shut off until it was turned on again. In several instances, it was reported that the replacement was performed in just 4 minutes.

This new patented valve design is typical of the sound engineering and outstanding values found in Fairbanks complete line of Bronze and Iron Body Valves.

YOURS ON REQUEST: Illustrated, descriptive folder gives complete information on Fairbanks Renewable Seat Ring Gate Valve, with details and specifications. Yours without charge. Write today.

Fairbanks COMPANY

393 Lafayette Street, New York 3, New York Branches: New York 3 • Boston 10 • Pittsburgh 22 • Rome, Ga. Valves • Trucks • Casters • Wheels • Dart & "PIC" Unions

1 Retaining screw loosened with ordinary screwdriver.



2 Finger hooks inside seat ring. Seat ring lifted out of valve body.



3 New seat ring is inserted. Retaining screw tightened.



Bonnet replaced on valve body.

For More Information Write No. 183 on Inquiry Card-Page 32

Catalog Files

SURFACE ACTIVE AGENTS

A 32-page catalog illustrates applications of a line of amphoteric surface active agents for industrial use. Formulation and chemical properties of each are furnished.

The Miramol Chemical Co., Inc.

Write No. 13 on Inquiry Card-Page 32

THERMISTORS

Fifteen different thermistor circuits are described in catalog, EMC 2. The 16-page brochure also gives specifications for 400 different thermistors. Their functions are explained.

Fenwal Electronics, Inc.

Write No. 14 on Inquiry Card-Page 32

VACUUM PROCESSING

Bulletin I-2 demonstrates how high vacuum drying, degassing, impregnating and filling can improve production techniques. Graphs detail the superior properties imparted by the process to products.

NRC Equipment Corp.

Write No. 15 on Inquiry Card-Page 32

WELDERS

A line of air or foot operated bench mounted spot welders are treated in bulletin No. 2-013A. The 8-page brochure describes units for joining small parts of unusual metal combinations.

The Taylor-Winfield Corp.
Write No. 16 on Inquiry Card—Page 32

RESISTORS

Test procedures to establish reliability of encapsulated carbon film and wirebound resistors are detailed in a 20-page, colored brochure. A section discusses ceramic core material.

Mepco, Inc.

Write No. 17 on Inquiry Card-Page 32

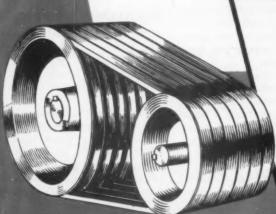


V-belt QUALITY meeting industry's severest needs

Immediate SERVICE to solve customer's problems

Special attention to CUSTOMER RELATIONS

Emphasis on dollar SAVINGS



DURKEE ATWOOD V-BELTS

DURKEE-ATWOOD CO., Minneapolis 13, Minn.



Eliminate "high-cost specials" by standardizing on

AMERICAN STOCK GEARS

Investigate and you'll probably find that instead of having to go to the added time and expense of ordering special gears, that your needs can be filled from the American line.

American is a complete stock gear line. It includes brass, bronze, steel, semi-steel, cast iron, and non-metallic gears in a range of 48 to 3 diametral pitch. Available from your nearby distributor of American Stock Gears.

Ask for FREE copy of American Stock Gear Catalog No. 360 containing detailed information and engineering data.

AMERICAN STOCK GEAR

division

Perfection Gear Co., Harvey, Illinois

For More Information Write No. 185 on Inquiry Card—Page 32

Letters To The Editor

NOT TO THE EDITOR

R. G. Wessells Procurement Officer District of Columbia

I am writing to you in regard to your letter to the editor of Purchasing Magazine in which you make reference to the reports of November and December of the Office of the District of Columbia as illustrating the values of adapting methods in contracting for construction projects.

I have been involved for the past two years in the formulation of policy and procedures necessary to implement our engineer procurement program in both construction and supply in the Far East.

I would appreciate the opportunity of reading the report you mentioned in the hope of gleaning new ideas that would possibly assist in increasing the efficiency and effectiveness of our present procedures.

If a copy of the report is readily available, request a copy be sent

Richard L. Moody Major, C. E. United States Army Japan Chief, Procurement Branch

MAJOR MOODY

I am forwarding a copy of the report which primarily is statistical. I am also enclosing a copy of a pamphlet we make available to prospective bidders and contractors on both supply and construction contracts.

We note that your letter was prompted by information that you obtained from Purchasing Magazine. We are forwarding a copy of your letter to them since it does testify to the widespread circulation of this publication.

R.G. Wessells
Procurement Officer
Government of the District of
Columbia
Washington, D. C.

• Although the above letters were not sent directly to the editor, we felt that our readers

would be interested in reading them. We are continually amazed, not only by the far-reaching affect of Purchasing Magazine, but also by the value received from even the smallest items in the book.

STICKER THAT STICKS

We found the article, "Setting Up A Vendor Catalog Library" (March 3, 1958 issue) very interesting. Our own vendor catalog library has been set up in a similar manner.

However, just as was pointed out in your article, we also are having difficulty finding a sticker which will adhere to some of the catalogs we have on hand. We would appreciate very much if you could advise us where the Duquesne Light Company finally was able to secure a sticker which would bind the various different catalogs.

G. R. Hathaway, Jr.
Globe Iron Construction Co.,
Inc.

Norfolk, Virginia

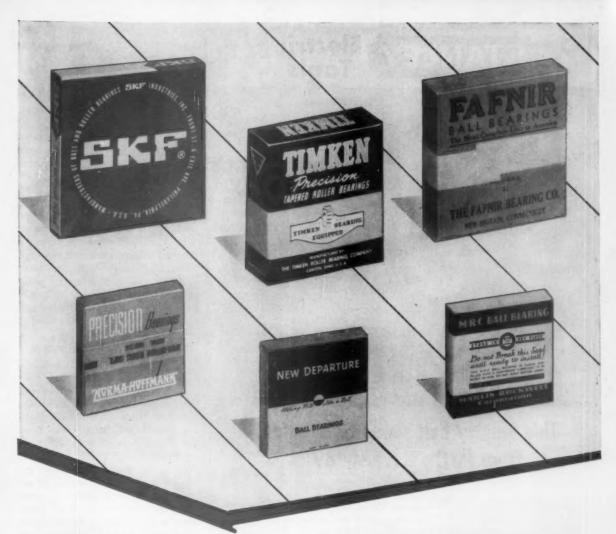
• H. B. Kerr, Jr. at Duquesne Light tells us that the sticker he uses is made by Avery Adhesive Label Corp., Monrovia, Calif. The trade name is Perma-Grip.

PURCHASING OPINION POLL

The question posed in your recent Ballot is rather difficult to answer in just a few words (Business Ethics: Is There a Problem? See complete results on page 15 of this issue).

I feel there has been a considerable improvement in business ethics in recent years. Most purchasing agents discourage the practice of gift giving and refuse to accept gifts of any consequence. I have been told this repeatedly by many salesmen.

Also, the so-called entertainment that once was part of the purchasing-selling relationship is being greatly played down and discouraged. I know that I value



Make Certain the BEARINGS you buy are in the MAKERS' SEALED BOXES

And what is so important about a manufacturer's box? Just this; surplus bearings or shelf worn bearings are usually shipped in one large package. Or, if individually wrapped, in plain boxes—often without any identification, usually of ancient "vintage". . . . and bearings do not improve with age.

Bearings from our stocks are always sold just as they

arrive from the manufacturer—fresh, fully protected and guaranteed to be first quality by the maker and ourselves.

We are *authorized* distributors for all of the many lines of bearings and accessories we sell. Our engineers can recommend the best bearing for your application.

Call the branch nearest you.

Providing bearing service in the North>

and

in the South>

BEARINGS.INC.

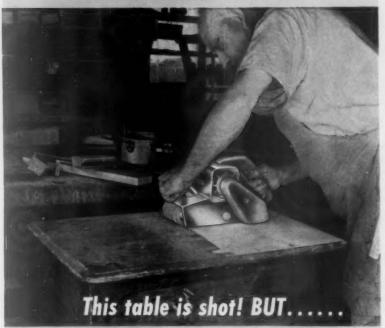
OHIO: Akron « Canton » Cincinnati « Cleveland « Columbus » Dayton » Elyria « Hamilton « Lima » Lockland « Mansfield « Toledo » Youngstown « Zanesville INDIANA: Fit » Johnstown » Philodelphia « Pittsburgh » York WEST VIRGINIA: Charleston « Huntington » Parkersburg » Wheeling » NEW JERSEY: Camden NEW YORK: Buffolo, Balanrol Corp. » MARYLAND: Beltimore » DELAWARE: Willimigaten

DIXIE BEARINGS, INC.

FLORIDA: Jacksonville • GEORGIA: Atlanta • KENTUCKY: Louisville • LOUISIANA: Baton Rouge • New Orleans
N. CAROLINA: Charlotte • Greensboro • S. CAROLINA: Greenville • TENNESSEE: Chattonooge • Kingsport • Knoxville • Mashville

For More Information Write No. 186 on Inquiry Card-Page 32

STANLEY Electric



This Stanley belt sander is shaping it up fast! ...just \$8995

As a matter of fact, this table is no test for Stanley's new heavy-duty H-31 Belt Sander. The H31 is engineered and powered to sail through much tougher jobs. It can cut and finish metals, plywood, plastics and glass.

Professionals everywhere use the H31 for their toughest finishing jobs. Yet it's rugged enough to actually shape and curve wood, too. Take a look at its other features. See if it isn't the kind of tool craftsmen not only want...but need!



- POSITIVE-DRIVE timing belt won't slip
- BIG, COMFORTABLE handles
- PERFECT BALANCE, stability, handling ease
- SIMPLE, ACCURATE tracking adjustment
- CARBIDE BUMPERS
 protect frame from belt
- TAKES STANDARD 3" x 24" or 3" x 23¾" belts

#36 ORBITAL SANDER— \$54.95 For fine finishes, flush sanding. Wide, flat pad receives full power. Thumb-tip switch, out-ofway cord—easy handling.

Ask your supplier to show you the H31 and the H36 sanders soon. For more details write: Stanley Electric Tools, Div. of The Stanley Works, 879 Myrtle St., New Britain, Conn.

Prices slightly higher in Canada

AMERICA BUILDS BETTER AND LIVES BETTER WITH STANLEY

STANLEY

This famous trademark distinguishes over 20,000 quality products of The Stanley Works—hand and efectric toots - builders, industrial and drapery hardware - door controls - aluminum windows - stampings - springs - coatings - strip steel - steel strapping—made in 24 plants in the United States, Canada, England and Germany.

For More Information Write No. 187 on Inquiry Card-Page 32

Letters

my personal time too much to waste it on such so-called entertainment.

I believe that the position of purchasing agent has grown in importance and prestige in recent years, which partly accounts for the improvement since most purchasing agents place a high value on their positions and would do nothing to jeopardize that position. Moreover, there has been a marked disappearance of the high pressure peddler-type salesman and today it is a pleasure to do business with the many high calibre, well trained men who call representing their companies.

J. H. R. Purchasing Agent

PRICE CUTS

I have just completed reviewing your recent articles, "How Do Supplier Price Cuts Affect Buying Decisions?" and "How Does the Purchasing Agent Respond to Price Cuts?", for the third time. More than being really interesting, we feel it would be an advantage to us to provide copies of these two items from your June 9, 1948 issue of Purchasing Magazine for each of our product sales managers and to the regional and district sales managers of Kaiser Aluminum.

We would therefore appreciate your permission to allow us to reproduce these articles in sufficient quantity for mailing to our people. Of course full credit would be given to Purchasing Magazine. If this is not agreeable, we would like to know if you have 100 of these articles for sale. If such reprints are available, we would like to know the cost and any other requirements applicable to their purchase.

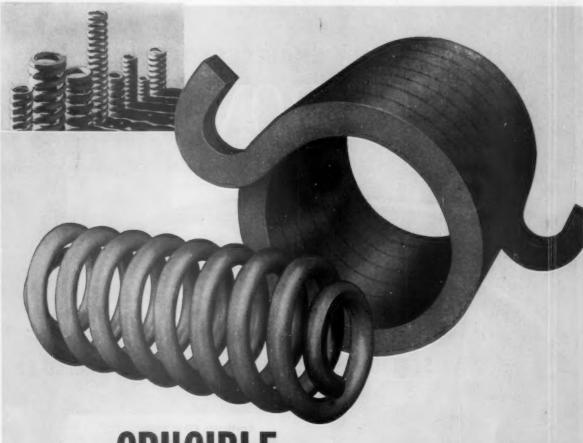
William H. Peretti

Supervisor

Kaiser Aluminum & Chemical Sales

Chicago, Illinois

• Since we do not have that many reprints of these particular articles, permission has been granted to Kaiser Aluminum to reprint.



CRUCIBLE FATIGUE-RESISTANT SPRINGS



"made stronger to last longer"

Crucible fatigue-resistant springs have far greater durability than ordinary springs. Furthermore, these springs, section for section, can take heavier compressive, tensile or torsional loads than ordinary springs. That's because they're shot peened. This process imposes a compressive stress on the spring surfaces that offsets stresses set up in service. It also conditions the surfaces, and eliminates minute stress concentration points which could

lead to premature failure in a conventional spring.

Try Crucible fatigue-resistant springs for lighter springs of improved design, greater precision and longer service life. For complete details, send for the Crucible "Coil Spring Design" handbook. Ask a Crucible spring specialist to call, too. Write: Spring Division, Crucible Steel Company of America, McCandless Avenue, Pittsburgh 1, Pa.

CRUCIBLE

HEAVY-DUTY COIL SPRINGS

ENGINEERED

FEUTRON FELTS



L'OUT WEATHER ... SEAL IN LONGER LIFE!

Synthetic Fiber Strip **Withstands Tremendous Heat Without Deterioration**

Outdoor lights have to be able to take it!

They're subjected to the ravages of the elements, flying

dust and constant vibration.

One of their most important component parts is the seal between the light's reflector and lens. This seal must be dependable! And leading manufacturers have found that a strip of rugged Feutron Felt effectively solves this problem. Felted of Dacron¹, this versatile engineering material significantly reduces maintenance costs because it's weatherproof and won't age or breakdown under high operating temperatures...its resiliency absorbs vibration. Lights stay brighter, longer . . . making streets, aprons, sidewalks, runways safer!

Feutron Felts offer other benefits, too. They're not affected

by chemicals and gases; are easy to precision cut, shape and work; are dimensionally stable and have high tensile strength.

Whether you manufacture portable or stationary lighting . . . or if you have a seal or gasket problem . . . Feutron Felts can help you. These synthetic-fiber Felts are fabricated of Dacron¹, Acrilan², Dynel³, Arnel⁴, Orlon⁶, Nylon or Rayon to meet individual chemical, thermal and physical conditions. Write today for Data Sheet, on company letterhead, please.

Remember: American Felt Company has the most extensive and best equipped staff of product engineers in the Felt industry with engineered materials for filters, wicks, insulation, decoration. Write for information, mentioning your application . . .

General Offices and Engineering **And Research Laboratories** 74 Glenville Road Glenville, Connecticut

Du Pont polyester fiber trademark. Chemstrand Corp. acrylic fiber trademark. Carbide & Carbon Chemicals Co., acrylic fiber trademark.

trademark. Celanese Corp. triacetate fiber trademark Du Pont acrylic fiber trademark.

46



Purchasing People In The News

The new director of purchases for Alloys & Chemicals Manufacturing Company, Inc., Cleveland, Ohio, is Alfred S. Dubin-



Alfred S. Dubinsky

sky. Mr. Dubinsky has been associated with the company for over four years in its scrap purchasing department. Since 1956 he has been scrap purchasing agent. Before coming to Alloys & Chemicals Mr. Dubinsky had been with Kaiser Aluminum & Chemical Sales, Inc. Prior to joining Kaiser he held a position as economist in the federal government, serving with the National Production Authority in Washington, in both the aluminum division and the office of civilian requirements.

Arch R. Young has been moved up to assistant manager of purchases of Talon, Inc., Meadville, Pa. Mr. Young joined Talon, Inc., in 1935 and has had 16 years experience as a buyer. He succeeds R. C. Straw who is approaching retirement. Mr. Straw will contine in the purchasing department where he will handle certain staff assignments.

General Foods Corporation, White Plains, N. Y., has named Simpson E. Spencer, Jr. director of purchases. Before joining General Foods Mr. Spencer had spent most of his business career in Cincinnati, Ohio. He was associated with Procter & Gamble Company there and, later, was coordinator

of purchases with the Wm. S. Merrell Company, a division of Vick Chemical Company in Cincinnati. He is a member of the National Association of Purchasing Agents and a former national chairman of the NAPA Chemical Industry Buyer's Group.

Appointment of E. W. Lindo as purchasing agent and materials supervisor has been announced by the Anthony Company, a division of Stauffer Reducing, Inc., Little Rock, Ark. Mr. Lindo will be in charge of purchasing, material handling and scheduling, inventory, warehousing and shipping operations. Prior to his new appointment, Mr. Lindo was purchasing agent for the Ashby Metal Forming Corporation in St. Louis, Mo.

Announcement has been made of the appointment of William H. Searfoss as director of purchases for Thermoid Company, Trenton,



W. H. Searfoss

N. J. Mr. Searfoss was formerly in the research and development department, Friction Materials. He joined Thermoid in 1949.

St. Regis Paper Company announces that Walter H. Monje has been appointed manager of the purchasing department. In this post, he succeeds Jack W. Hartung who was recently appointed director of purchases for the com-

pany. Mr. Monje, who was assistant manager of the purchasing department, has been associated with St. Regis since 1925. He joined the purchasing department in 1946.

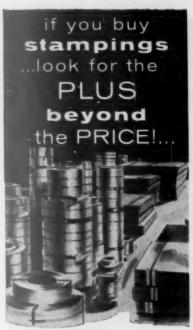
Howard W. Watson has been promoted to director of purchases at the Miller Brewing Company, Milwaukee, Wis. He



Howard W. Watson

succeeds Fred C. Hoppe who has retired. Mr. Watson has served as assistant purchasing agent at Miller since December 1950. Previously, he was a brewery worker in the production division and a materials control foreman. An active member of the National Association of Purchasing Agents, Mr. Watson has been selected as publicity chairman for NAPA's Products of Industry Show slated for Milwaukee in 1959. He also is author of a chapter on containers in "Industrial Purchasing", a college textbook. The new assistant purchasing agent at Miller is George J. Steiner.

Edwin W. Weiland has been appointed purchasing agent for Bostrom Corporation, Milwaukee, Wisc. Mr. Weiland succeeds J. H. Kitterman who has been assigned to special projects in product cost analysis. Before coming to Bostrom, Mr. Weiland was assistant purchasing agent for American Motors, Milwaukee for over eight years.



immediate availability of material for instance

On hand always in our plant is an extensive inventory of a wide variety of materials*. available normally only on special order from mills.

No need for our customers to wait for such materials!

For your next hurry-up stampings . . . look for this plus beyond the price . . . immediate availability of material . . . and let us quote before you buy!

A brochure is yours for the asking!



DETROIT STAMPING COMPANY

Established 1915

408 Midland Ave., Detroit 3, Mich.

"America's Leading Job Stamping

*Our stock of materials includes-closetolerance spring steel, both tempered and annealed; copper and copper-base alloys, various analysis of carbon steels, and imported Swedish Flapper-Valve steel.



For More Information Write No. 190 on Inquiry Card—Page 32

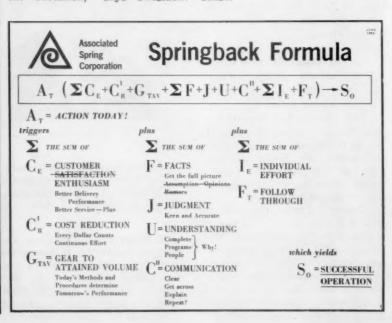
FOB-"filosofy of buying"

P.A.'s WHO are also prospective by Mr. and Mrs. Louis Thuringer. Papas should get a kick out of the Thuringer is purchasing agent unusual birth announcement sent for Stone Container Corp.

PURCHASE ORDER NO. 3 STORKLAND, U.S.A. DATE May 12, 1958 TERMS Net Cash SHIP TO Same TO Jean and Louis Thuringer 7637 Kingston Avenue Chicago 49, Illinois DELIVERY Chicago Lying in Hospital BUARTITY DESCRIPTION Weight: 6 lbs. 9 ozs. PRICELESS STORKLAND, U.S.A. By Sol. T. DeLee, M.D.

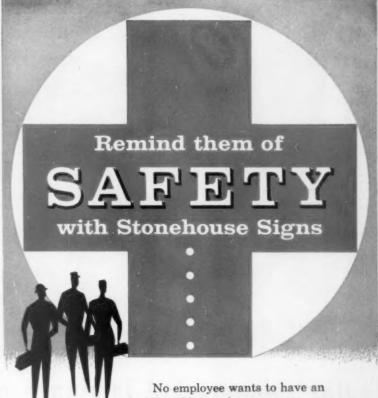
A SSOCIATED SPRING Corp. has come up with an interesting twist on recession cures. It's a "Spring-back Formula" to remind all its employees of the principles of good management that lead to successful operation. "Our organization must do a better job than ever to overcome the effects of the recession," says President

Carlyle F. Barnes. "Our formula begins with the recognition that a customer is all-important to us. Without him we can do nothing." The rest of the formula is reproduced on this page. It looks a little formidable at first. But if you give it more than a glance you'll see it makes a lot of good



BACKDOOR selling is beginning to get like the Holy Roman Empire. The latter, as an eminent historian (Gibbon?) pointed out, was neither Holy, nor Roman, nor an Empire. Backdoor selling of course has not been real selling for quite some time now since economic logic has forced most progressive companies into putting full buying authority in the purchasing department. And now even the backdoor part in disappearing. A few weeks ago, returning from lunch with a purchasing agent we were interviewing, we ran into a new technique. A salesman for a well-known line of electrical controls had pulled a trailer into a company parking lot behind his car, and flipped open its sides. It was a mobile display room which he was enthusiastically showing to the electrical maintenance foreman and a couple of assistants. Our purchasing friend was a little bit surprised, completely unperturbed. "Looks like parking lot peddling is taking over from backdoor selling" he smiled. "Will you make it hard for him;" we asked. "Don't have to," said the P.A. "This is probably his first call here. He can keep making calls that way from now until doomsday and he won't make a sale. Somewhere along the line he'll find out that our purchasing department arranges all interviews and selects all sources. Once he gets out of the parking lot and into the purchasing department maybe-maybe-we'll do some business with him."

BETHLEHEM Steel Corporation's purchasing department receives a handsome tribute in the latest issue of the company's employee magazine, the "Bethlehem Review." All 32 pages of the issue are devoted to the story of what and how the purchasing department buys from over 30,000 suppliers. You might be able to pick up an idea or two from it for publicizing your own operations inside or outside your own company. The company's public relations department is located in Bethlehem, Pa.



THE BEST SAFETY DEVICE IS A CAREFUL - MAN -

SAFETY FIRST



No employee wants to have an accident! Yet carelessness costs management and labor thousands of days of production and millions of dollars each year. Frequent reminders—particularly in places where accidents can easily happen—keep employees alert to danger and cut costly accidents. These reminders, made often and inexpensively by bright, easy-to-read signs, are an important step in an effective safety program for your company.

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Taylor copper-clad laminate printed circuits reduce cost of TV crossover network by 66%

Also eliminate subsequent installation costs and improve reliability of part

Hugh H. Eby Company, Philadelphia, Pa., has reduced the cost of producing crossover networks for VHF-UHF television sets approximately two-thirds by changing production methods and switching to circuits printed on Taylor copper-clad laminate. It has also eliminated subsequent installation of the part on antenna masts, thereby greatly improving part reliability.

Taylor copper-clad laminate was selected for two reasons: dimensionally stable after hot punching, it assures uniform hole size and good registration; its rolled-copper surface, free of pinholes, pits and lead inclusions, provides consistently good etched circuits.

You, too, may have applications where Taylor copperclad laminates will cut costs and improve reliability. Our application engineers will be glad to discuss them with you. Both the Norristown, Pa., and La Verne, Calif., plants are equipped for prompt supply of basic materials or fabricated parts. Write us for details. TAYLOR FIBRE CO., Norristown 36, Pa.



Above (right) is shown the old-style crossover network with its housing. Below it is the new printed-circuit network. The small, compact network costs one-third as much to produce and is assembled in the television set instead of on the antenna mast.



Highlights of This Issue

Purchasing Ethics: Is There a Problem?

Ever since vicuna became a favorite luncheon topic, business ethics has been subject to a great deal of attention. In any discussion of dishonesty in business purchasing usually has one of the warmest seats just because of the nature of the job. There's hardly anyone outside the profession who doesn't have one or two stories about buyers getting kickbacks. In this issue, Purchas-ING Magazine makes an intensive study of purchasing ethics. In the Opinion Poll on pages 15 and 17 several hundred P.A.'s give their evaluation of business ethics in general. The article on page 55 discusses some of the charges that have been made against purchasing and summarizes the results of the overall Purchasing Magazine study. On pages 56 and 57 a number of the purchasing profession's leading executives give their views on the subject. In, "Dishonesty in the Purchasing Department," (page 58), a management consultant tells how a program can be set up which will prevent fraud and cheating by removing temptation. And for a view of the gift-giving problem from the salesman's perspective see "No Gifts, Please!" on page 60.

✓ Purchasing Reports to Management

If you don't take credit for what you have done, someone else probably will. If you feel that top management doesn't know or doesn't care about what's happening in the purchasing department, it's probably your own fault. That's one of the reasons for reports— to keep management posted on what you are doing. Stuart Heinritz, in an article on page 64, tells what to report, how to report it and when to report it.

How to Get the Most Out of Quantity Discounts

One of the problems that every purchasing agent wrestles with is keeping inventories and at the same time trying to make certain that he doesn't miss out on a substantial saving by failing to take advantage of large quantity discounts. One company has worked out an easy-to-use chart which quickly shows whether it's more profitable to place a large order or a small one (page 62).

Small Company Inventory Control

The job of taking a complete annual physical inventory is expensive and time consuming. But there's one small company that has gotten rid of this problem. At the same time it has increased the accuracy of its inventory accounting. It's an unusual system and it's paying off in larger profits (see page 68).

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Made in a Full Range of Types and Sizes

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CRISIS IN BUSINESS ETHICS

THERE ARE MANY THINGS in business that seem to move in cycles. One of them, unfortunately, is the state of business ethics. The long term trend is upward but every once in a while, for reasons that are not altogether clear, there is evidence of a general relapse in moral standards. And we are in one of those periods now.

We have already been impelled to sound the warning that moral values are deteriorating. At the risk of some repetition we must sound that warning again, with added emphasis. For this may well be the No. 1 national and business problem today. The cornerstone of our entire economic and enterprise system is personal and corporate integrity. When that fails, the whole structure is weakened. At a time when our system is definitely on trial in the court of world opinion, any weakening of this sort is a high price indeed to pay for opportunistic personal gain.

The poorest excuse in the world is that "Everybody's doing it." And of course everybody isn't doing it. But the temptation becomes stronger with every new revelation of unethical dealings among the insidious minority. When business generally comes under suspicion, there are always a few more who decide that they may as well have the game as the name.

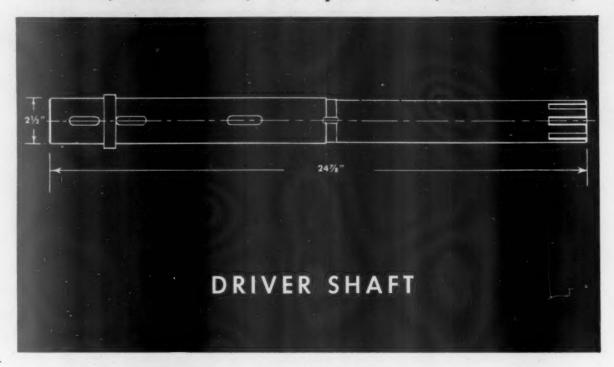
We have never held the censorship of the acts and motives of others is any part of the purchasing responsibility. We have consistently maintained that it is a purchasing agent's duty to himself, his company, and his profession, to conduct his office in a manner that needs no ethical justification because it is above the taint of suspicion.

Let us now add to this credo the belief that a good example can be just as potent and influential as a bad one—provided that it is sincerely and positively practised, that it permeates an entire department, and that it admits of no compromise with the highest standards. Call this puritanical if you will. It is the only way.

If enough purchasing men have the guts to take this stand, it will do much to halt the present deplorable trend and restore integrity and public confidence to business. Then we shall indeed have a cycle instead of a trend—a cycle that is at the turning point toward higher business ethics and morality.

Stuart F. Henritz

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EVER SINCE the Goldfine-Adams explosion, attention has been focused on business ethics. It's only logical that much of this scrutiny centers on purchasing. The P.A. and the buyer hold positions in which their honesty is tested daily, and where there is more opportunity for corruption than in almost any other management job.

There has always been gossip both within the purchasing profession and on the outside-mainly on the outside-about the fabulous kickback arrangements, the lavish gifts, the money-under-thetable deals that some buyers take part in. Along the same line, Sales Management magazine recently surveyed a group of salesmen on the question of bribery-bribery of buyers, that is. The survey received a fair amount of national publicity. Unfortunately, the report, to say the least, is not particularly flattering to the purchasing profession.

Condensing the Sales Management report (July 18, 1958), the article makes these points:

• Of salesmen who had been asked by buyers for payoffs during the last year, 18% said current requests were more frequent than they were five years ago; 52% said they were about the same; 30% reported a decline.

To quote from the article: "We told panelists, 'we assume you have turned down requests for payoffs. Accordingly, you lost the business.' Thirty-five percent said that they did. But, encouragingly, 65% report they still get the same amount of business. So it is two to one in favor of an ethically correct, stiff backbone in dealing with the chiseling buyer."

• Slightly more favorable is the fact that 59% of the salesmen said they had never been asked for a bribe during the past year. Approximately 22% said they were approached for payoffs "only once" or "rarely" during the year.

• In commenting on the size of the bribes, the article stated: "The amounts of cash, in several

Principles and Standards of Purchasing Practice

National Societies:

Is There a Problem?

Justice to those with whom he deads

Faith in his prophe are doned the N. A.P.A. All transactions for the societies in the societies in

cases, are incredibly petty. For example, one panelist reported an attempt to shake down \$10, another \$12.50, another \$20, one \$25, another \$65."

Because of the importance of this subject, Purchasing Magazine, in this issue, has made a special study of the problem of business ethics—especially the ethics of the purchasing profession.

On pages 15 and 17 are the results of a Purchasing Opinion Poll on the subject of business ethics in general. The findings are encouraging. Forty-seven percent of the P.A.'s surveyed say they think there has been an improvement in business ethics in the last few years. Thirty-nine percent noticed no change, while only 14% felt there had been a deterioration of business ethics.

Of those who felt there had been a decline in business morality, the majority cited "competition," "trend toward easy living," and "unethical salesmen," as the reasons. One mentioned "the closer personal relationship among buyers and suppliers and the increasing bulge of the salesman's expense account bankroll."

Top P.A.'s Speak Out

Even more encouraging are the results of interviews with a number of the nation's leading purchasing executives. They commented freely—often with fervor—on the state of business ethics in purchasing (turn page).

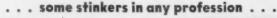
Generally these purchasing leaders seem to feel that slack morals are a not a serious problem for the purchasing profession. However, they did stress the need for continued vigilance.

All the P.A.'s interviewed said they felt there had been a marked improvement in purchasing ethics since World War II. The reasons: stronger company policies, education of salesmen by buyers, centralization of the purchasing function.

Credit to N.A.P.A.

Most of them also gave particular credit to the efforts of N.A.P.A. And in an interview with PURCHASING Magazine, N.A.P.A. Executive Secretary Treasurer Howard Ahl pointed out that: "More than 30 years ago, the N.A.P.A. developed a 'Principles and Standards of Purchasing Practice.' Included in these principles for P.A.'s are: 'Loyalty to his company,' 'Justice to those with whom he deals,' 'Faith in his profession.' Over the years N.A.P.A. has not wavered from that stand and, periodically, advocates to its membership the repudiation of commercial bribery in all of its forms."

Purchasing Executives



E. F. Andrews, Pitman Moore Co.



FEEL very strongly about the issue of honesty in purchasing. There are always some stinkers in any profession. Of course there are P.A.'s who will ask for bribes, but, if a survey were made, there wouldn't be many P.A.'s who could say that they haven't been approached by salesmen offering n shady deal.

"One of the major problems in many companies-and some of the top one at that—is that purchasing can't get top management to take a strong stand on the gift-giving problem. Purchasing will ask for a directive making it illegal for anyone to accept a gratuity of any kind. But they'll be turned down because the company's sales department makes a practice of giving presents and management doesn't want to have conflicting policies.

"But if a buyer accepts a cigar, then why not a lighter, and perhaps a bottle of scotch to complete the picture. The whole thing snowballs. You won't be able to stamp out this problem until top management steps in and makes it a hard

and fast rule that no one can accept anything."

we pay our buyers enough . . .

Kenneth Geist, Allis-Chalmers Corp.

HE FIGURES in the Sales Management* article (see preceding page) surprised me. I don't think there's much dishonesty in our area and I know there are no under-thetable deals in our company.

"But bribery is a problem that will always be with us. Salesmen will always be trying to break into a company or attempting to get a larger share of the business. Not long ago, for example, I had one salesmen who came in and calmly asked me who and how much he'd have to pay to get our business. He got a short answer.

"I think that in many of the bribery cases you hear about,

it's not purchasing but some other department.

"Our buyers deal with salesmen who are in high salary brackets. This could make them resentful. But we pay them enough so that they won't be easily tempted."



let the salesman know he can't buy your business . . .

Adolph G. Ruediger, Carrier Corporation



LOT has been done by N.A.P.A. to combat dishonesty in purchasing. And I'd say that 99 44/100% of P.A.'s work according to the N.A.P.A., code. Frankly, I just can't imagine any P.A. asking for a bribe. He would lose his job if it ever got to the front office. Everybody in purchasing is approached at one time or another and the only way to handle the situation is to let the salesman know that there is no way your business can be bought.

"Generally speaking, I'd say the problem has reached the point where it's about as good as it's ever going to be. People being people, there will always be some corruption."

View the Ethics Problem

. . . sour grapes from salesmen . . .

Daniel G. Donovan, Pepperell Manufacturing Company

So FAR as that Sales Management* article is concerned, I think it's mostly headline stuff. And I feel that no member of N.A.P.A. would ever be involved in a case of bribery. The report in the article about buyers asking for \$10 bribes is ridiculous. If this is true, it reflects more on the buyer's intelligence than his honesty.

"Frankly, I think that many of the rumors you hear about buyers being bribed are just sour grapes from salesmen who don't get the business.

"For the most part, I'd say that if a buyer gets a gift and admits it, then it's all right—so long as the gift is reasonable. But the buyer must remember that his company ultimately pays for whatever he gets."



. . . if it wilts in a day . . .

Ralph O. Keefer, Aluminum Company of America



BRIBERY [again referring to the Sales Management article*] is one of the oldest forms of corruption known to man. Thus it is perhaps perfectly natural that everyone meets temptation sometime during his life. But a P.A. is no more susceptible than any other individual—and in fact he may be less susceptible because he is trained to resist it. He soon learns that his behavior must not only be right, but it must also look right to the world. P.A.'s as a group should not allow themselves to be placed on the defensive.

"What can be done to make certain that purchasing ethics are always on the highest level? Recruiting has a lot to do with it. At Alcoa, we wait until a man has 7 to 15 years' experience in other company departments before bringing him into purchasing. This means we know a lot about him, his family and his habits."

"On the subject of gifts to purchasing personnel, I think there's a lot of common sense in the old saying that, "If it wilts or can be consumed in a day, it's probably all right."

... honesty is a basic requirement of the job ...

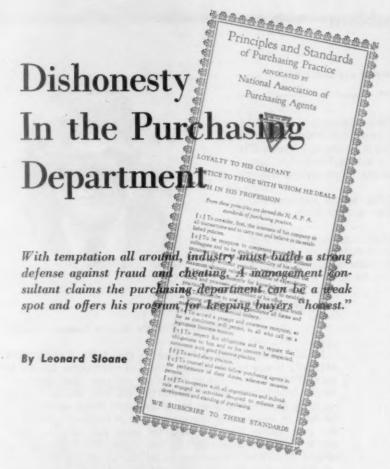
T. A. Corcoran, Courier-Journal and Louisville Times

⁶⁶A CTUALLY, I found some encouraging things in the Sales Management* survey—mainly the fact that 30% of the salesmen say they are asked for bribes less frequently than in the past and that 82% say the situation hasn't gotten any worse than it was. Another encouraging aspect: the majority of the salesmen said they still received the same amount of business even when they didn't go along with the buyer's request for a bribe.

"I'd certainly say that there has been a definite improvement in buying ethics since purchasing became more centralized. If a man has chosen purchasing as his career, honesty is one of the basic requirements of the job."



*For details of the Sales Management magazine article, see the section set in bold type on page 67.



JOHN M., a buyer for a mediumsized company, decided one day that his salary was inadequate for his needs. He determined to increase his income and spent many hours thinking up a plan. He finally hit upon a scheme that raised his standard of living considerably before he entered the state penitentiary.

John's method revolved around the cooperation he received from a number of unscrupulous vendors who were anxious to increase their sales at any cost. From time to time, these suppliers would deliver their shipments to John's home instead of the plant. John would O.K. the invoices and the suppliers would be paid. Meanwhile, the merchandise would be sold by John through private sources.

Of course, this case is the exception to the rule. Of the thousands of buyers and purchasing agents throughout the country, the vast majority are honest. Yet

the problems of kickbacks and manipulations of purchase orders are nevertheless quite serious ones for the purchasing profession.

Proper Controls

"Companies are more dependent for survival on the buyer and purchasing agent than ever before in the last two decades," says Norman Jaspan, head of the New York management engineering firm of Norman Jaspan Associates. "It's important, therefore, to set up proper controls to reduce the opportunities for dishonesty. I call that preventive management."

Jaspan estimates internal theft of merchandise and equipment costs business at least \$1 billion a year. Perhaps even more surprising is his claim that more than half of those who are caught are well-paid trusted executives and supervisors.

Jaspan's firm and its fact-find-

ing division, Investigations, Inc., handle many industrial cases involving dishonesty and mismanagement. In a substantial number of these cases, he says, the trouble is in the purchasing department.

Jaspan charges that in recent years there has been an increase in business dishonesty—often in the buyer-vendor relationship. It takes various forms: maybe a supplier will give a buyer a "loan", set up call girl or gambling charge accounts, finance a stock market fling, or, more often, distribute expensive gifts or provide lavish entertainment. Some even put a buyer or members of the buyer's family on the company payroll.

Inferior Grades

One of the stories Jaspan likes to tell is that of the purchasing agent for a large hotel chain. The P.A. set up standard kickback rates which all suppliers were required to pay if they wanted any orders. Liquor suppliers had to kickback three to five percent of the invoice price, vendors of fruits and vegetables had to pay five to 10 percent, and meat vendors had to pay seven percent.

Another gimmick the P.A. used was to accept inferior merchandise, while authorizing payment for premium grades. Eventually he was caught.

"About 25 percent of all people are basically dishonest," according to Jaspan. "Another 25 percent are basically honest. The remainder are honest or dishonest according to circumstances. The director of purchases or purchasing agent should see to it that the circumstances at his company encourage honesty.

"It's a simple fact: 99 percent of all dishonest practices are committed by employees who were honest when first employed."

Need Planned Program

By adopting a planned program, Jaspan feels purchasing agents can eliminate most forms of dishonesty that might exist in their departments. This program, to be presented in Jaspan's forthcoming book, "The Thief in the White Collar," was revealed exclusively to Purchasing Magazine prior to publication and con-

tains these two basic proposals:

(1) The philosophy that kick-backs are a standard practice in the trade and must therefore be tolerated should NOT be accepted.

(2) All purchasing personnel should be informed that they are expected to maintain proper business relationship at all times. This should be put in writing and set forth as official company policy.

With these proposals as a guide, Jaspan has outlined a plan for purchasing agents to establish in their own companies. Here are

the essential points:

(1) P.A.'s must emphasize to all their buyers that they risk dismissal when they accept gratuities of more than token value. Buyers should also be informed that they are violating the law when they do this.

(2) Buyers must be made aware that the company can and does find out about kickbacks. They should be instructed to:

a. Refuse to purchase from vendors who are relatives or from firms in which they have a financial interest, without the approval of the purchasing agent.

b. Refrain from buying from financially risky suppliers.

(3) Buyers should authorize their company, upon employment or promotion, to make a careful check of their financial resources.

Full Disclosure

"I don't see why this type of investigation hasn't been standard operating procedure all along," states Jaspan. "Full disclosure of financial resources is demanded by banks when they extend credit of several thousand dollars on a home or even an installment credit loan of a few hundred dollars. There should be no timidity, then, in insisting on full disclosure from a buyer or purchasing agent responsible for purchasing millions of dollars worth of goods per year."

(4) Both vendors and buyers should be reminded at Christmas time that employees are prohibited from accepting gratuities, except for token gifts not exceeding a stated nominal value. They should also be told that all gifts must be delivered to the place

of business.

Mail room personnel should be instructed to record all packages addressed to buyers—indicating from whom, for whom, and a description of the article or package. Then, after January 15 buyers should be required to submit a list of vendors who sent them gratuities and a description of the items and their worth.

"The mere announcement of a program like this would be a sizable deterrent to dishonesty," Jaspan says. "It's far more important to stop dishonesty before it starts than to take corrective

action after the first mistake has been made. By that time, the damage has already been done."

The consultant concludes that buyers should not rationalize kickbacks by any false standards of morality. He feels that the buyer who admitted getting \$10,000 from vendors each year for placing orders directly with company officers has no leg to stand on. Says Jaspan, "it's true the supplier would have had to pay a salesman's commission otherwise. But when the buyer gets the same money, that's not only immoral. It's downright illegal."

A Classic Case Of Kickbacks

Stories about unethical salesmen and buyers are old hat by now, but here's one that really takes the cake. The facts were included in an article on "White Collar Crime," published about a year ago by Life Magazine. Perhaps the most important thing to note about this tale is that the culprit was NOT an industrial purchasing agent—he was a buyer for a subsidiary of Sears Roebuck and Co., the nation's largest mail order house.

Prior to 1952, when Sears "asked" for his resignation, this buyer had purchased millions of dollars worth of coats for his company to resell. By reliable estimates, his kickbacks from manufacturers, for giving them advance information about the type of clothes he wanted to buy, amounted to more than \$250,000. When his services were finally terminated, he had \$124,000 in bonds and cash stashed

away in 27 different banks.

In addition to cash payments, salesmen were wont to give him all sorts of gifts. He fleeced clothing for himself and his family by charging the bills to the accounts of various manufacturers. His new home was furnished with a few small useful items—like a custom built TV set, a deluxe gas range, a refrigerator, and other "improvements"—through the kindness and generosity of salesmen who were looking for big orders.

But grandiose as these operations were, what really drove the cooperating manufacturers crazy were his "extracurricular" demands. For instance, one vendor was detailed to take his aged parents to dinner almost every night. Another's wife "volunteered" to supply a home-cooked turkey every time the buyer craved fowl. And one supplier even had to push the buyer's father's wheel chair around when

requested.

It goes without saying that this shrewd entrepreneur was caught and given his just deserts. At latest reports, his family and parents have become accustomed to new eating habits and are adjusting to their new situation with a modicum of effort.

No Gifts, Please



Editor's Note: This documented expose of the buyer-seller yuletide maneuverings was written especially for Purchasing Magazine by the sales manager of a large manufacturing company. For reasons obvious primarily to himself and his family, he prefers to remain anonymous. And since his identity is known only to us, we herewith pledge never to reveal it under any conditions—except to P.A.'s who wish to place substantial orders with our author's forthright and consistent firm.

I CAN still remember the few belated, straggling thank-you notes that came across my desk as a result of the 1957 annual Christmas largesse. The fact that only a few thank-you notes dribbled in is in itself as salient a position as any to begin this investigation of the propriety, value, significance, expense and tribulation of industrial gifts at yuletide and other

times. I, of course, refer to the time-honored, but controversial custom in business of remembering a purchasing agent or buyer or both with something more than a cheery card between December 1 and 25.

I do not know whether it represents a basic lack of etiquette and questionable background or just plain sheepishness at the whole situation, but buyers and purchasing agents as a whole are notably neglectful and inconsiderate at acknowledgments. They may be sharp bargainers, but gratitude is not one of their strongest characteristics.

This facet is attested by the countless experiences of turning a plant upside down to rush a special job for one of these creatures and bail him out of a mess, only to have his memory so short-lived that the next time the part or commodity is up for grabs he'll give it to XYZ Corporation for a penny less.

I don't expect a buyer to drool at the mouth and fall all over himself just because I sent him a box of tangy Wisconsin cheese or a bottle of Old Rumdum, but I still would like to know whether or not he received my wondrous package. Nor are written thankyou's, while preferred, at all essential. But it is amazing how many of these voluble gents (when you are a cent high or a day behind schedule) are incapable of any verbal expression of gratitude.

This, then, can be one consideration in trimming a business Christmas list down to tolerable size. Decidedly, eliminate everyone who does not acknowledge your gift. How can he expect you to keep this up year after year when you can't possibly know if he even received it. Moreover, if this is the buyer's subtle way of discouraging the practice—fine. Let him win. Be discouraged.

No-Thank-You Letters

Of course, long before department store windows show a trace of tinsel—in August, as a matter of fact, one begins to receive pon-



tifically worded letters from vicepresidents and some P. A.s themselves which, in lofty terminology, request that tangible remembrances be discontinued and the names of any individuals in that particular organization be stricken from your lists. Some go so far as to hint at the "preferential treatment" presumably expected etc. They are certain you would not want your gift misconstrued.

An analysis of these letters is in itself very enlightening. Each one reflects a little different situation. Take Case A. Here is a large corporation with several plants scattered throughout the country. Some smug subaltern at the home office sends one of these sermonic missives to all suppliers. The underlings in the provinces are aware of it, and no doubt long before their upper echelon colleague had taken this distressing step they had catalogued him by that expressive five letter word so widely used in male society. Now, the boys in the provinces, even including the province satrap himself, don't expect you to be buffaloed by the letter and forget them entirely, but they do rely on discretion. By this I mean, positively the use of the home address at all costs, and no office discussion when you call along the lines of "How did you like it?"

Case B takes the form of a letter from a hypochondriac P. A. who doesn't drink, smoke or look at girls. He is the type who has the sole decent-paying job in the department. His only son is a dentist in some distant city, and he and his wife grow roses in their backyard. God alone knows what they do in the winter.

The desk jockeys in his department are not necessarily venal or opportunists. They are merely poor, underpaid drones confronted each month with the formidable task of eking out a bare existence what with payments on the house and car, the second bedroom full of kids, and the pressures of constantly educated tastes. A bottle of good hooch, a box of assorted goodies, a basket of grapefruit or even a plain old box of candy is a big deal to fellows like this, but not with old killjoy on the prowl. Apparently some of these lords

and masters have the fear so instilled into their subordinates that the latter are afraid to accept a stick of gum—and so report it.

There's always the chance that this snide breed of individual suspects that his buyer is being festooned with more gifts than he and wants to quash the whole thing. Conversely, there are buyers who capriciously assume that for every bottle of champagne they net, the P. A. gets four. This creates an air of suspicion in the department at the very time of year good fellowship and harmony are supposed to prevail.

Just For the Record

I recall a vivid incident last year when the no-go letter arrived after we had sent a modest cheese list to our distributor. I never expected any untoward repercussion. The cheese was going to everyone's home address. Besides, I never considered this type of gift in the nature of creating any sense of obligation. Quite the contrary, a recipient could always tell you he received your so-andso cheese and has had stomach trouble every since. But in this instance, my friend evidently and honestly reported my donation to his superior who immediately dispatched a surly letter to my at-

Customer or no customer, I could not help but reply in like vein and express indignation that a small box of assorted cheeses could have caused such an erup-

tion and ruffled industrial relationships to the extent indicated by the force of his volley. Needless to say, these names have been stricken from our lists, and the subject of Christmas, gifts, cheese or our exchange of correspondence has never been discussed on my subsequent personal calls there.

Case C is the humdrum letter from a purchasing agent who is a whale of a good fellow. Mind you, he is not one with his hand out and will treat you just as regularly and squarely whether or not you remember him at Christmas—or any other time—at all. He's just a darn good egg, but he is aware of the undercurrents in the business world and just to play it safe he sends out a routine letter which then is present in the files if his president should ever get interested in this subject

Of course, the P. A. continues not to care a hoot if you send a present or not, but if you do this type of gentry knows how to say thank-you. An experienced industrial sales representative can literally smell this category of letter.

The other sort of letter you can detect by its odor comes under Case D. It is a politely, but firmly worded note, short and crisp, from a vice president—sometimes even the P. A.—and somehow or other is very definitive. It ends the matter right then and there.

The big anomaly in this whole Christmas-gift atmosphere is the

(Please turn to page 86)

Joe, how 'bout you and your wife joining me for dinner tonight? After that I've got seats for "My Fair Lady" and a reservation at the Copa. Sure, Sam, I'd love it.

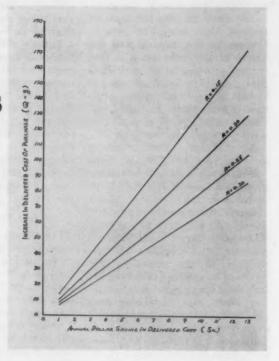
Joe, I bought you an LP record for Christmas.
I'ts the recording of "My Fair Lady."

Mr. Brawn, how dare you! We do not accept gratuities in this department.

Don't Discount Quantity Discounts

One of the factors affecting the decision of how much to buy is the quantity discount offered by many suppliers. To determine whether this lower unit cost is a real saving it must be balanced by the extra investment and extra cost of carrying inventory. Here is a successful but easy way of doing this.

E. S. Muller, Plant Purchasing Agent United States Rubber Company, Naugatuck, Conn.



P URCHASING PEOPLE are constantly trying to keep their inventories of supplies and raw materials at the lowest practical level. In doing so, they may fail to take advantage of savings they could get by buying larger lots at a lower unit cost. In other words maintaining the lowest possible inventories is not necessarily the most economical way to operate.

Buyers are repeatedly faced with decisions concerning how much to buy. Should they, or should they not, buy a little more and obtain a lower price? To help buyers decide, we use a chart that shows whether a contemplated quantity purchase is warranted.

The use of this chart is valid if:

- The market price is stable for the duration of the supply purchased.
- 2. The item will not spoil in storage.
- 3. The package will not deteriorate in storage.
- The item will not become obsolete before the supply is consumed.

The vertical and horizontal scales are expressed in dollars. The

oblique lines show values having the stated rate of annual return on the money invested. We call these "return" lines.

Here are the steps we follow in using the chart:

- Determine the delivered cost of the large lot purchase;
- (2) subtract the cost of the small lot purchase;
- (3) to get the increase in value of the purchase quantity.
- (4) Determine the annual requirement in units;
- (5) multiply it by the unit saving by buying the larger quantity.
- (6) This gives the annual dollar saving by buying the larger quantity.
- (7) Read the value of (3) on the verticle scale of the chart and draw an imaginary horizontal line. (Laying a straight-edge horizontally will help.)
- (8) Read the value of (6) on the horizontal scale of the chart and lay a vertical straightedge at this point.
- (9) If these lines cross below the desired "return" line, the large purchase is warranted.

If the lines cross at, or above, the desired "return" line, the quantity purchase is not warranted.

In order to read a value on the vertical or horizontal scales of the chart it may be necessary to divide the value obtained in (3) or (6) above by 10 or 100 or 1000, etc. But this can be done mentally, and will give reliable results provided the values of both (3) and (6) are divided by the same

To illustrate, let's assume that we expect to use 5000 lbs. monthly of a certain clay. In 5000 lb. purchases, the price is 5½¢ per lb. plus ½¢ per lb. freight, totaling 6¢ delivered.

We have learned that it costs 5¢ per lb. delivered in 40,000 lb. cars.

- (1) Delivered cost, large purchase is
 - 5¢ x 40,000 or \$2,000.00
- (2) Delivered cost, small purchase is 6¢ x 5,000 or 300.00
- (3) Increase in value purchased is \$1,700.00
- (4) Annual requirements 5,000 lbs. x 12 or 60,000 (Please turn to page 104)

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A Simple Way to Know Commitments

By John E. Verardo

The Aeroflex Corp., Aeroflex Labs. Divn.

I T'S IMPORTANT to good financial management to know your purchase commitments. Both aspects of commitments are equally important: (1) dollar value, and (2) probable invoicing date.

There are, of course, elaborate machine accounting systems to produce this information. But how can the small company obtain the facts easily and inexpensively?

Our experience has shown that it can be done very simply by the use of separable tabs on purchase requisitions (see figure 1). This is made part of our purchase requisition form as a perforated detachable tab. On it appears the value of the proposed purchase, account number, and probable invoicing period.

Before the order is issued, these lines are filled in. When the purchase order is written, the tab is torn off the requisition and placed in a box with a slotted opening. The slot restricts access to the tabs and prevents their getting lost.

The slotted container is picked

up periodically and its contents summarized. The summary includes accumulation of charges not only against the account number but also as to probable invoicing period.

This basic plan can have several variations. Among these are:

Putting the tab on the purchase order;

Collecting on daily, weekly, bi-weekly or monthly basis;

Delivering container directly to the comptroller's office;

Using accumulative instead of non-accumulative reporting.

Purchasing Reports to Management

- · What to report
- · How to report it
- · When to report it

By Stuart F. Heinritz

THE PURCHASING AGENT who complains that management is unaware of what the purchasing department is doing usually has only himself to blame. For who is to give this information to management unless the purchasing agent does so himself? And who is in a better position to provide the information in proper emphasis and perspective than the person who is doing the job?

Do you argue that management isn't particularly interested in purchasing performance? Then you haven't a proper respect for the significance of your function in the company's overall welfare and policies, and you're doing very little toward enhancing the position of purchasing—and of yourself. Management entrusts a very large responsibility to its purchasing departments, and it is only logical to assume that

I you don't take credit for what you've donesomeone else will. it is concerned with how that responsibility is being handled.

Do you argue that management will ask for a report if it wants one? That usually happens only when something seems to be going wrong, so you put yourself needlessly on the defensive. You lay yourself open to the very unfortunate position of coming to management's attention only in the most unfavorable light.

Do you hesitate on the grounds that a report to management smacks of "blowing one's own horn"? Well, that depends largely on how it's done. If the facts warrant it, it's perfectly legitimate to report a job well done. By and large, management wants to give credit where credit is due. If you don't take credit that you have earned, somebody else probably will.

What Management Wants to Know

A pretty good guide to the kind of report that will interest management and help management is an analysis of why management set up a purchasing department in the first place and the specific responsibilities that are vested in the department.

Pemember: top management only wants the broad picturenot the details.

Management entrusts purchasing with the spending of a large slice of money, usually the biggest slice in the entire financial budget. So one of the first things management wants to know is how much money is spent through purchasing each month. That's the picture of purchasing activity in dollar terms, the terms of management thinking. Don't make them dig it out of the accounts payable records, which frequently lag behind current purchases and may not include forward commitments that are equally important to the complete financial picture.

You can make this information more meaningful by breaking it down into major categories—raw materials, fabricated parts and components, operating supplies, fuel, transportation costs. Don't make the classifications too fine; that's merely confusing without adding any usefulness. And stick to dollar values. The number of requisitions processed or of orders issued is your problem, a detail that management has turned over to you as an incidental chore in the spending of the dollars. Save that type of information for a statistical summary at the end of the year,

or for an interim report to the personnel department to support your request for a larger staff to handle the work load.

Management puts upon purchasing the responsibility for having needed materials on hand. So a second pertinent topic is the size and state of the inventory. That should be in dollar terms too, for investment is management's first measure of inventory. It should also be translated into terms of forward coverage at current rates of use, for that is the purpose of inventory. It should also be supplemented by the current rate of inventory turnover, which is an indication of the efficiency with which this phase of purchasing is being handled.

If surplus and scrap disposal comes within purchasing department responsibility, a summary figure of such sales can also be included. It's an income item, in contrast with the record of expenditures. More important, it's an indication that the investment in materials is being kept on a live, useful basis.

Report on Performance

Management places on purchasing a large responsibility for product cost. From the practical standpoint, how well the purchasing job is being done is judged on the basis of prices paid. The most convincing way of showing this is by comprehensive price index of major purchased items, properly weighted to provide a representative indication of purchasing's price performance when set over against some standard index of commodity prices. In lieu of this, charts showing market price and purchase price of selected key commodities serves a similar purpose. Significant changes in material prices should be individually noted. All of these angles have an important bearing on the company's product cost, which is of primary concern to management. The unit in this case is the percentage of advance or decline, rather than the dollars and cents change.

Some purchasing departments include a summary of cash discounts earned. This is pertinent because it does actually reduce the cost of purchased materials and it is an indicator of the alertness of buyers to such opportunities and their efficiency in processing the transactions promptly. Management uses this information as an index to credit conditions and the general money supply. This figure should be presented as a percentage of total dollar purchases. It is interesting to note that in many cases the cash discount item approximates the cost of operating the purchasing department-about 11/2%although there is no direct correlation of the two factors. It would be illogical to interpret this as meaning that the company's purchasing service is had "for free", but it does indicate that other purchasing advantages and accomplishments are indeed "plus values" on the profit statement.

A report of specific savings resulting from value analysis, successful negotiations, development of new supply sources, approved substitutions, etc., has a place in the departmental report, as a special item. They should include only audited savings, initiated by purchasing suggestion or action. On the basis of such an audit, the true significance of the saving is shown by projecting it on an annual use basis.

Special Purchasing Information

In the regular course of purchasing work, a good deal of information is accumulated that is pertinent to general management policies as well as to purchasing itself. Trends in price and availability of materials, the general tone of business as reflected in sales contacts and negotiations, the economic situation as reported in association and business publications, the study of special market reports, new techniques and ideas on the management of materials—all these contribute to better purchasing performance and are among the important tools of purchasing. Management too has its own sources of information, but those enumerated are peculiar to purchasing and would normally escape the attention of general management unless purchasing systematically includes them in its reports to management. This can be done either by summary or by direct routing of the material. Less tangible than some of the operating figures cited in previous paragraphs, this type of information can be among the most helpful. And it is highly constructive

Use graphe to get your story across quickly

evidence of the value of an alert purchasing department, and of purchasing's participation in over-all management.

Techniques of Reporting

The effectiveness of departmental reports and the attention they will receive depends largely on the manner of presentation. Here are eight principles to be observed:

(1) Pertinence. Reports are instruments of communication, not an end in themselves. They should be confined to subjects that are directly helpful to management in keeping its finger on the pulse of the business and in making policies and decisions. As indicated above, there is much in the day-to-day activities of purchasing to fit into this pattern without straining for subject matter or diluting the essentials. All extraneous

matter, and details of interest only to purchasing, should be rigidly excluded.

- (2) Summary. Management is interested in the broad picture, in results, not details which it has delegated to a department. The figures that help management are the summary figures, intelligently classified. It must have confidence that the summary is supported by more detailed data that can be produced if necessary. The best evidence of this is the selectivity and organization of the information in its significant, summary form—an attribute of good managerial ability in the reporting department.
- (3) Comparison. Isolated statistical information has little meaning by itself. The dollar value of a month's purchase is just a figure. Put it alongside the corresponding figure for the previous month, or the average for the year to date, and it shows a condition and a trend.
- (4) Graphic Methods. A chart or graph tells more, more quickly and more clearly, than a column of figures. It is a technique that is readily adaptable to the principles of both summary and comparison. In the competition for management's time and attention, the graphic presentation that can be assimilated at a glance is far more effective than the most painstaking tabulation or the most explicit written exposition.

It helps if you can give an interpretation of your facts and figures

(5) Interpretation. Figures must be interpreted to be put to use. Presumably management will make its own final interpretation; that is why management calls for and reads reports. But management also reasonably expects the benefit of interpretation by the purchasing agent who makes the report. He is closer to the situation and knows the significance of the information he has complied. His expressed opinion gives management a running start toward its own interpretation and conclusions. This is, in a sense, the measure of pertinence in the report. The more management learns to rely on the purchasing agent's interpretations, the more effective is purchasing's participation in management decisions.

(6) Projection. Statistical reports are past history, water over the dam. Management wants to know not only where it stands, but where it is going. The purpose of reports is more than a current audit. They should be a guide to future policy and action. Many of the items in a report are capable of being projected to show future probabilities. With graphic reports this is almost an automatic visual reaction. But it may be misleading if a turning point in the graph is imminent. Be explicit in the projection of expected future developments. That is a part of interpretation. In graphic presentations use a dotted line to project future trends.

no report is complete unless the facts are interpreted.

- (7) Recommendations. Reports are a guide to action. Whether this is in the form of a policy, or improved procedure, or special action in view of special circumstances, a specific recommendation is in order. Management expects its department heads to be advisers, and respects the executive who has a plan. The advice and the plan may not always be accepted, but the purchasing agent has a much better chance of getting the policy, the procedure, or the action he wants if he expresses his opinion. The report is one good way of doing this.
- (8) Frequency. Reports should be made as frequently as there is something to report, or as frequently as is necessary to keep management currently informed. The monthly report, corresponding with the common accounting period, is a logical interval. It gives a perspective to statistics that is not present in more frequent reporting, and in most instances is frequent enough to be current for managerial purposes. Too frequent reporting loses impact and trends to be received as a routine affair. A special report can always be made if circumstances require. The annual departmental report, with its more detailed account of activities, is too often a formality "for the record". Most of the information is stale. It cannot be used as a current guide to action. What the purchasing agent should be interested in is a working report—one that works for his department and for the welfare of the company. Management likes that kind of reporting too.

Methods Program Slashes Purchasing Paperwork





A carefully designed "tear-down" table speeds the breaking up of completed purchase order forms for distribution. The table is designed to permit the girl to conveniently reach a number of slots each of which holds copies of orders destined for a given department.

Now orders are filed in open shelves by the last three digits of the order number. As a result, there is more efficient use of floor space. Time studies also indicate that orders can be both filed and removed from file much faster than before.

INDUSTRIAL ENGINEERING techniques were recently applied to purchasing paperwork at General Electric's Jet Engine Department in Evendale, Ohio. The result: lower costs and greatly improved clerical efficiency. Order writing is now almost completely mechanized. Even filing and the separating of individual purchase order copies for distribution has been improved by application of industrial engineering techniques.



Purchase orders were formerly filed in the conventional manner—by purchase order number in standard filing cabinets.

Make Small Company Profits Big

Here's how one small southern manufacturer gets bigger profits through its purchasing department. An unusual way of handling inventory record-keeping and a realistic approach to the make or buy problem show the way.

By Harold C. Barnett

A SMALL manufacturing company in Atlanta, Ga., has eliminated entirely the tedious and expensive problem of taking a complete, annual physical inventory. Instead, it has adapted a version of the conventional perpetual inventory system.

The Auto-Soler Company manufactures automatic nailing machinery for shoe repair stores. Replacing the old-time, handwielded hammer of the cobbler, the equipment mechanically nails soles and heels to shoes.

L. T. Spivey, who has been purchasing agent for three years, went into the purchasing department from cost accounting. About the Auto-Soler inventory method he says, "It's great. It gives us no trouble at all. And, in addition, the accounting auditors love it."

The system is deceptively simple. It is particularly adaptable to a small company operation with a large number of items in the storeroom.

Goes to Stockroom

Here's how it works: When material in the production department-reaches the reorder point a conventional material requisition is sent to purchasing. However, instead of going direct to the purchasing department it is "short-stopped" in the stockroom. Here, an actual physical count of the requisitioned item—and this item only—is made, and the amount noted on the requisition.

There is no hold up of the requisitions; they are processed on the same day they are received.

The purchasing department then checks this new balance against the inventory control card. Auto-Soler is now assured of having the right inventory information at its finger-tips.

Not only is the annual physical inventory eliminated but shortages are immediately turned up. Changes in usage trends show up quickly, too. No longer is there the problem of waiting for the plant to close for the summer vacation to take a complete inventory only to find unexpectedly that critical materials are in short supply. It is impossible for a situation to develop where a critical item runs out in the middle of a production run causing expensive downtime.

A particular item might be checked or counted as many as three or four times a year. Others might not be checked at all. Mr. Spivey is not concerned about inactive items, so no year-end check is made on inactive accounts. They are allowed to remain dormant for one more year and are then written off the books.

If this inactive stock is not destroyed but sold for scrap, the dollar value is entered in the accounting records as income, which satisfies the treasury department regulations.

No Adjustments Needed

It's not surprising that this new method is extremely popular with the accounting auditors. Of the more than 4000 items held in inventory the auditors take about

200 which represent the greatest dollar value and make a spot check. Since the new method was installed there hasn't been a single instance of the auditors having to adjust the inventory account.

Auto-Soler developed this system because of the extremely unsatisfactory results obtained from the commonplace annual inventory method. The last time a complete physical count was made the company had to ask ten of its hourly workers to come in during the regular vacation shutdown. Even using mechanical scales the job took two full days and resulted in a 5% adjustment to the inventory account. The adjustment itself was serious enough. But when Auto-Soler had to readjust these same accounts the next year, they decided they had had enough.

Make or Buy

Profits at Auto-Soler are also increased by the meticulous care with which the purchasing department decides whether to make or buy. In general, if the "make" cost is equal to or less than the "buy" cost, the purchasing department will recommend that the item be made in their own plant. Close liaison between purchasing and manufacturing gives Purchasing Agent Spivey the insight to know when certain departments in the plant are operating at peak. If the workload is heavy, Mr. Spivey is more likely to decide to buy rather than make.

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GOENTITY IN STOCK COUNTED BY

The material requisition, by the addition of one small box, becomes the focal point of the entire inventory-taking system.

"It is easy to make a decision if you have all the information," says Mr. Spivey. He makes sure that he has all the data necessary for a make or buy decision by getting the actual costs of everything made in the shop.

The make or buy decision is not one that is made once and held sacred for all time. When each parts requisition is received Mr. Spivey sends out three requests for quotations. These quotations are then compared with the standard cost to make that particular item. The Standard Cost System as set up at Auto-Soler is based on attainable standards. They are established on a basis of anticipated costs of material, labor and overhead for an estimated rate of production.

The standard costs are always kept up to date. Production orders on "make decisions" provide a record of the costs of each new job as it progresses through the plant. The material costs are checked and verified by purchasing and forwarded to accounting. The next time a decision comes up to make or buy a particular item the purchasing department is equipped with the facts it needs.



L. T. Spivey, purchasing agent, feels that the Auto-Soler Company version of the inventory system is easily adaptable to any small company operation.

Salesmen's Claims: When Do They Stand Up Legally?

The law is pretty much on the side of the purchasing agent when it comes to enforcing warranties and guarantees made by salesmen. However, there's no reason for P.A.'s to get complacent. Special rules and exceptions constitute pitfalls for the uninformed buyer.

By L. E. Treadway

How much reliance can the purchasing agent place on the statements and claims of salesmen? The professional buyer, through his experience and training, acquires skill in evaluating the "sales pitch." By development of qualified and reliable sources of supply he is able to eliminate, in large measure, the hazards of false assurances and unfounded claims.

However, in spite of his skill and the reliability of most suppliers, the purchasing agent should know what protection the law affords. As a practical matter, he has little time or opportunity to investigate salesmen's claims. And such claims often become, of necessity, the basis on which the buyer makes his decision to purchase. Under such circumstances, the legal validity and enforceability of guarantees and warranties thus given are of great consequence to the purchasing agent.

Most professional buyers are aware that, under the law of agency, salesmen are generally much limited in their authority. In dealing with the buyer, the salesman's capacity, in a legal sense, is limited to the solicitation of orders and their transmission to the home office of his principal. Generally, in the absence of special authority given by his employer, he lacks legal capacity to make a firm commitment as to price, delivery, or other details of the contract of sale.



WHEN A BUYER SIGNS A FORM OR CONTRACT WHICH STATES THE SALESMAN HAS NO AUTHORITY TO MAKE A WARRANTY, THE BUYER GENERALLY CAN'T RECOVER FOR ANY WARRANTIES MADE BY THE SALESMAN.

In view of these general rules, the purchasing agent might well be concerned about the authority of salesmen to make warranties and guarantees enforceable by the buyer against the salesman's company.

Oral Warranty Authority

In a leading case on this question an action was brought by a poultryman against a feed company for breach of an oral warranty that use of defendant's product by a prescribed method would not result in loss of hens or egg production. The alleged warranty was based on statements by the defendant's salesman. It stated that the product had achieved in tests, and could achieve for the plaintiff, certain

production results. The authority to make the claims was derived from the defendant's state manager through its district manager, both by direct communication and by instructions given at sales meetings.

Evidence showed that the poultry raiser was given a circular by the salesman entitled "New Easy No-Mix Self-Feed Concentrate," with instructions on the "cafeteria" method of feeding hens. The salesman repeated statements in the circular and also told the plaintiff of tests showing up to 90% egg production. Allegedly, this feed always resulted in an egg yield of not less than 65% and would do so for the plaintiff.

After using the product as

recommended, the egg yield declined sharply and the loss of many chickens was experienced.

In holding for the buyer the Supreme Court of Utah held "that error was not committed in submitting the case to the jury upon the theory of express warranty . . . or in permitting the jury to find that the salesman had express or implied authority to make a warranty."

In its decision the court cited and relied upon the provisions of the Uniform Sales Act which protects the buyer by providing that "any affirmation of fact or any promise by the seller relating to the goods is an express warranty, if the natural tendency of such affirmation or promise is to induce the buyer to purchase the goods, and if the buyer purchases the goods relying thereon." (Lavar Park v. Moorman Manufacturing Co., 241 P2d 914.)

This case contains a number of important rules. It is indicated that the salesman possessed unusual authority to warrant his product because of the instructions given by the district sales manager. It was also clear that the sales representative had legal authority to warrant in accordance with the advertising material shown the buyer.

General Rule

Case decisions in many jurisdictions bear out the general rule stated in an Oklahoma case "A general authority to an agent to sell personal property carries with it, by necessary implication, authority to warrant the quality of the property." St. Louis Cordage Mills v. Western Supply Co., 54 Okla, 757).

Industrial purchasing agents will be interested in an older and well accepted case in which, to induce a sale of steel, the salesman represented that material offered would be the same as sold to another nearby customer. When quality proved inferior, the buyer successfully maintained suit. The court applied the presumed authority rule to support the right of the salesman to refer a prospective purchaser to a lot of steel in the hands of others as showing its quality and thus to make an implied warranty that the lot shipped would be equal

to that lot. (Dayton v. Hoaglund, 39 Ohio State 671.)

Unusual Warranties

While the law favors the purchasing agent with respect to claims and guarantees which are usual and in the normal course of selling, his position may be much less secure when he asks the salesman for an assurance which is extraordinary for the product or industry involved. Several cases may be cited to illustrate situations in which the buyer needs more than the assurance of the salesman to obtain a legally enforceable warranty.

In Johns v. Jaycox, 67 Wash. 403, a salesman "guaranteed" in writing that if the buyer would purchase and give away 200 of this employer's record players, the buyer would sell an average of not less than 25 records to each person receiving a record player within four months. When that promised sales of records failed to materialize, and suit was brought against the seller, the court held that the salesman lacked implied authority to make such an unusual warranty. This could have been made only with the express approval of his principal.

In another and less ridiculous situation, a leather salesman stated that colored leather to be supplied the buyer for linings in making women shoes would not fade or crack. The court ruled for the seller holding that evidence is admissible that all colored leather linings will crack and that such a warranty is unknown in the leather trade. (Valley Shoe Corp. v. Stout, 98 F2d

514.)

Again in an Illinois decision, it appeared that in the sale of a compound for use in manufacturing roofing materials the salesman assured the buyer that his product could be successfully used in place of a mixture previously used by the purchaser. On suit by the buyer the court held that even if the agent's statements amounted to a warranty, authority to make them could not be implied because not shown to be usual and that "the only authority that is implied from the mere fact of agency is to sell in

the usual manner in which goods ... of that sort are sold." (Central Commercial Co. v. Lehon Co., 173 Ill. 27.)

Compare, however, the decision in Pikert v. Marston, 68 Wisc. 465, in which a Wisconsin merchant ordered fish from Massachusetts in reliance on a salesman's warranty that shipment would arrive in merchantable condition. When shipment arrived in spoiled condition the buyer brought action on the alleged warranties. The seller defended on the basis that, having shipped the fish in good condition, the custom and practice of the industry precluded any other warranty. The court held for the buyer, saying that in order for custom to bar a salesman's warranty it must be shown that the buyer had knowledge of such custom or that the custom was generally known and accepted in the locality where the sale was made.

The buyer is also protected, even though the salesman's warranty is unusual, if the home office of the seller approves the transaction. On this point the Supreme Court of Illinois said "If a person contracts with an agent and the principal has recognized the transaction, a warranty by the agent is a warranty by the principal." (Woodford v. Mc-Clenahan, 9 Ill. 85.)

As a corollary to the rule that salesmen are generally authorized to make only usual and customary warranties, it is well established that such customary warranties can be enforced by the buyer even though it is shown in evidence that the salesman was forbidden by his principal to make such a warranty. The result would be contrary if it were shown that the buyer had knowledge of such restriction. Reynolds v. Mayor and Co., 57 N. Y. S. 106.

Big Boy's Authority

The degree of reliance which the purchasing agent can place on statements of sales representatives may depend, in a legal sense, on the relationship of the representative to the seller. A sales manager possesses greater implied authority than the salesman and both have a degree of agency different from brokers and commission agents.

As an illustration, it was held in a New Hampshire case that, although an ordinary salesman lacked such authority, the general sales manager of an automobile concern could warrant against repair charges for 30 days in selling a used truck. Eastman v. Waisman, 94 N. H. 253.

It is also interesting to note that the courts have recognized broader implied authority of salesmen introducing a new product or entering a new sales territory. The reasoning in these decisions has been that extraordinary guarantees are necessary to gain acceptance for an untried or unknown product. For example, unusual warranties concerning performance of trucks, made orally by the salesman, were held enforceable in an Oklahoma decision. The court found that an agent possesses broad authority to warrant performance "when an untried article is sought to be introduced in a new field." (Int. Harvester Co. v. Lawyer, 56 Okla.

Purchasing agents can be guided by the general assumption that brokers and manufacturers' representatives are subject to greater legal limitations than other classes of salesmen in warranting the items they sell. However, it is well established that a broker is authorized, by legal implication, to make the same warranties made to him by the seller. The broker can also use the same description and specifications supplied in the seller's advertising and catalogs. (Distillers' Distributing Corp. v. Sherwood Distilling Co., 180 F2d 800 Maryland).

It is equally well established that brokers cannot make special warranties as to the suitability of a product for the buyers' particular needs. Also, such representatives lack authority to go beyond the description and specifications furnished by the seller.

In Reid v. Alaska Packing Co., 47 Ore. 215, action was brought by a purchaser for damages allegedly arising from failure to deliver salmon. Seller's Chicago broker had agreed in writing with plaintiff that salmon delivered would be "equal to the best Puget Sound Fancy Sockeye". It appeared in evidence that seller did not pack or advertise this grade. The court held for the defendant saying that a broker with mere authority to sell had no implied authority to warrant quality or specifications beyond the express information supplied by seller.

Advertising and Catalogs

Broadly speaking, all classes of salesmen are held to possess implied authority to warrant materials and equipment in accordance with advertising literature, catalogs, and samples provided by the principal. However, such literature and advertising are not construed as an implied limitation on the capacity of salesmen to give warranties which go beyond the literature. But in an Alabama case it was held that a salesman had no implied authority to make other warranties where the advertising literature exhibited to the buyer was in such terms as to place the purchaser on notice that no further warranties were intended. Loegler v. C. V. Hill Co., 238 Ala. 606.

Several decisions make it clear that manufacturers are bound by the assurances contained in their literature, even though the salesman merely makes oral reference to it and does not exhibit such literature to the buyer. In a strong older case, it was held that the buyer could enforce a warranty by the salesman that tires would not blow out. Advertising published by defendant contained the statement "won't blow out", but this was not shown to the plaintiff. Federal Rubber Co. v. King, 12 Georgia App. 261.

In another interesting decision it was held that a salesman had authority to warrant his principal's flour in accordance with printing appearing on the bags that the flour was "extra high patent." Hunter Milling Co. v. Satterwhite, 60 SW2d 316 (Texas.)

Battle of Forms

With the broad field of implied authority to make warranties given salesmen by the law, it is not surprising that many concerns use printed forms expressly denying or limiting such authority. These exclusions of authority may appear in order blanks, acknowledgments, and contract forms.

The purchasing agent is all too familiar with what is commonly called "the battle of forms." The intent of both seller and buyer is, of course, to limit the conditions and obligations of the transaction to only those set forth in his own printed forms.

From the buyer's standpoint, printed disclaimers of salesmen's warranties may serve to bar recovery against the seller on such warranties. This will be true if the purchasing agent has signed a form prepared by the seller or if he has accepted shipment of goods on the seller's terms. An editorial comment in 40 Amer. Law Reports 316 summarizes the law as follows: "As a general rule, a form of order or contract signed by the buyer which informs him expressly or impliedly that the salesman has no authority to make a warranty is conclusive against

Please turn to page 106



and this cloth is guaranteed for the life of the user.



GUARANTEES WHICH ARE UNUSUAL FOR THE PRODUCT OR INDUSTRY INVOLVED ARE NOT LEGALLY ENFORCEABLE



Screws on the floor mean trouble at your door! Ordinary fasteners when used in the assembly of thin gage metal sheets, often spin or slip—result in work stoppages, salvaging operations, higher production costs.

Now you can substantially reduce waste motion, rejects and lost time, with Parker-Kalon's new "Hi-thred" Self-tapping Screw... the new fastener that grips securely without spinning or slipping...

even in very thin gage metal sheets.

Developed by P-K's research team, the revolutionary "Hi-thred" is threaded full to the head—with the last thread actually terminating in an annular orifice in the head itself!

For samples, see your nearby Industrial Distributor or write P-K direct. "Hi-thred" fasteners are available in production quantities in Types "A" and "Z" in non-countersunk head styles.

PARKER-KALON° "Hi-thred"

Self-tapping Screws

Sold everywhere through leading Industrial Supply Distributors

PARKER-KALON DIVISION, General American Transportation Corporation, Clifton, New Jersey

For More Information Write No. 196 on Inquiry Card-Page 32



Products and Ideas

EXPENSIVE PROTECTIVE enclosures for open-type motor applications are no longer necessary. Open motors with protection built into the insulation are now available.

A major factor in this evolution is an all-silicone-rubber insulating system for form-wound stator coils in large motors. Another is epoxy-encapsulated coil structures for field windings of large synchronous motor rotors and for stators of smaller frame motors with random or mush-wound coils.

Allis-Chalmers Manufacturing Co., Milwaukee 1, Wis., uses both in its Super-Seal line of open motors. This line can be used in the chemical, paper, petroleum, metals and rock product fields, and wherever moisture, heat, dirt, dust, or other contaminants are a problem. Complicated motor enclosures, designed to protect inadequate insulations can thus be eliminated at substantial cost savings.

Improved Insulation Widens Open-Type Motor Applications



This motor is able to run under water because of a new type of insulation developed by Allis-Chalmers.

Heat-Treatable

Titanium Alloys Available

THREE NEW heat-treatable titanium alloys are now available from Crucible Steel Company of America, Oliver Building, Pittsburgh 22, Pa.

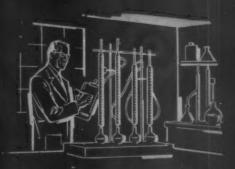
The three alloys have the unique advantage of being "formageable"—capable of being readily formed in the so-called solution treated or "soft" condition and then strengthened by simple thermal aging treatments. The strengths obtainable with each of these alloys are higher than previously possible in titanium sheet materials.

One of the new alloys, B-120 VCA, is the first heat-treatable all-Beta titanium alloy to be produced. This new Beta alloy represents a major technological breakthrough for the titanium industry, comparable to the development of austenitic stainless steel in the stainless steel field.

It is the most versatile titanium base alloy yet developed. For example, it has both the highest strength and best formability of any titanium base material; it is ductile-weldable; it is cold-headable; and it has deep hardenability which fits it for high strength-weight honeycomb foil at one extreme and for thick heat treated sections at the other. It holds great promise for applications in guided missiles where savings of pounds of weight mean hundreds of miles of increased range.

The other two new alloys, C-105 VA and C-115 AMoV, are expected to find wide use in the advanced aircraft now being developed.

For More Information Write No. 197 on Inquiry Card—Page 32->



Thirty years' research devoted exclusively to . . .

STAINLESS STEEL VALVES

Aloyco's specialized research . . . in the field and in the lab . . . brings you a wealth of metallurgical information for successfully solving your corrosives-handling problems.

Coupled with continuing research in design, foundry and machining techniques, this Aloyco specialization results in new and better corrosion resistant valves for many specific applications. One example above: Aloyco completely jacketed valves (the first ever to be integrally cast in high alloys) are designed for viscous liquids and other fluids difficult to move at room temperatures.

Isn't your surest source of supply the one company with research, manufacturing and sales all devoted to Stainless Steel Valves exclusively?



ALLOY STEEL PRODUCTS COMPANY

Linden, New Jersey





"MILES OF SAVINGS" RIDE ON COPE CABLE LADDER

Over two miles of Cope aluminum cable ladder support countless miles of aluminum interlocked armored cable at the first unit of Metropolitan Edison Company's new Portland generating station, currently rated at 165,000 KW. Ultimate capacity is expected to be approximately 1,000,000 KW. Selection of Cope cable ladder by Gilbert Associates, Inc., consulting engineers, permitted necessary system flexibility and ease of installation . . . at cost savings and quality not possible with other available methods and materials!

ASK FOR PROOF FROM COPE

Other manufacturers can only talk about your system requirements—Cope is prepared to prove Cope system performance with accurate technical data, load deflection tables, actual heating tests, etc. Whenever you ask about cable supporting equipment ask for proof!Cope has it.

System Layout No Problem

Cope cable ladder combines main stringers of "Z" section aluminum with slotted rungs at specified intervals for securing of cables. Strong, yet lightweight, it is easy to handle, easy to install—even in the most cramped quarters. Cope's complete line of fittings and accessories permit required changes in direction, elevation or other conditions of system layout. Cope's pin-type coupler joins ladder straight section and/or fittings in seconds ... permits easy connection to other Cope systems ... expanded metal wireway (trough) and cable channel. Every Cope system is complete ... no hardware or other extras to buy later.

Cuts Costs Three Ways

A single run of Cope ladder or wireway supports as many cables as several runs of conduit. From the start, you save in materials and labor costs . . . keep space requirements to a minimum! An easy-toget-at Cope system cuts maintenance costs, too . . permits ready re-routing of existing cables or adding of new cables in the future. All Cope cable supporting equipment is available in aluminum or hot dip galvanized steel construction.

Contact your authorized Cope distributor . . . or write to T. J. Cope Division, Rome Cable Corporation, Collegeville, Pa.

T. J. COPE Division

For More Information Write No. 198 on Inquiry Card-Page 32

Products

Flange Spreading Tool



A different type tool for spreadflanged pipe connections speeds the insertion of gaskets, orifices, etc. A unique feature of this tool is a circular cam wedge. This feature, plus the use of a ratchet handle, provides pipefitters with a lightweight, handyto-carry tool that will spread a flange in a matter of seconds. The tool eliminates all the old and hazardous methods of spreading flanges. It is especially useful in minimum working space. Made of heat-treated steels, the tool is marketed by the Wm. L. Riggs Co., Tulsa, Okla.

Write No. 18 on Inquiry Card-Page 32

Rectilinear Potentiometer



A rectilinear potentiometer. that meets environmental specifications of Mil-R-19, is announced. This small, compact trimming resistor measures only 11/4" in length. It is available in a complete range of resistances. The completely enclosed housing is made of glass reinforced alkyd for increased strength and stability. The potentiometer is designed for easy and precise adjustment. It is available with insulated, color coded wire leads. The potentiometer is a product of De-Jur-Amsco Corp., 40-01 Northern Blvd., L.I. City 1, N.Y.

Write No. 19 on Inquiry Card-Page 32

For More Information Write No. 199 on Inquiry Card—Page 32→



Reduce your instrument supplies inventory...

let this Honeywell Central Supply Depot stock them for you

You save storage and inventory control costs, when Honeywell stocks your instrument parts and accessories at this Central Supply Depot in Philadelphia.

Recorder charts and inks, thermocouple wire and wells, extension wires, and all the other instrument supplies you need are stocked here. Thousands of different kinds of instrument parts, too.

You can easily order whatever you need through your nearby Honeywell branch office. Emergency

orders are teletyped to the Supply Depot within minutes. Most orders are shipped within 24 hours.

Prompt delivery of parts and accessories from the Central Supply Depot is but one of the many services that make instrumentation by Honeywell mean far more than just instruments.

MINNEAPOLIS-HONEYWELL, Wayne and Windrim Avenues, Philadelphia 44, Pa.

Honeywell



First in Control

Bottles Store Products at High Pressure



Plastic bottles are now available for containing liquids or gases at high pressures. Manufactured from continuous windings of glass fiber, impregnated with resin, the bottles are lightweight, strong and shatterproof. They can be fabricated to withstand operating pressures from 100 to 5.000 psi, according to requirements. Their shape is normally spherical. Other shapes can be made to order as required. No volumetric restrictions are involved in their manufacture. Apex Reinforced Plastics, Div., White Sewing Machine Corp., Washington & Elm, Cleveland, Ohio, make the bottles.

Write No. 20 on Inquiry Card-Page 32

System Stores Tape Recorded Data



A central tape data library will store 3,048 two-minute segments of recorded information. The magnetic tape recorded data can be easily located. Seven items can be played back simultaneously. The system consists of four 7-foot racks of equipment and a seventrack output loop transport with a remote selector keyboard and an Electrofile index. The Electrofile index permits easy selection and cataloguing of the recorded information stored in the system.

Recorded data is classified according to a specific category. The system may be procured from Electronic Engineering Co. of California, 1601 E. Chestnut Ave., Santa Ana, Calif.

Write No. 21 on Inquiry Card-Page 32

Vibratory Feeder Handles Miniature Parts



A vibratory bowl feeder handles miniature parts at speeds up to 30,000 pieces per hour. It will feed minute parts, one by one, into precision sorting and measuring equipment for further processing. Feed rate is adjustable. Depending on the pieces to be fed, volume varies from 2000 to 30,000 per minute. Feeder will handle pieces up to .001" in thickness and up to .250" in dimension. Pieces may be of any shape-spheres, rounds, squares, rods, tubes, etc. Feeder is a product of Affiliated Manufacturers Inc., Lebanon, N.J.

Write No. 22 on Inquiry Card-Page 32

Accessory Mounts Drill Head Overhead



A 20-inch drill head can now be mounted on an overhead track. This setup is useful in drilling panels, sheets, plates or large work or in other applications were the work is difficult to move. (Please turn to page 82)

FOR TOP QUALITY CASTINGS CONSULT A MEEHANITE FOUNDRY

The American Laundry Machinery Co., Rochester, N. Y.
Atlas Foundry Co., Detroit, Mich.
Banner Iron Works, St. Louis, Mo.
Barnett Foundry & Machine Co.,
Irvington, N. J.
Blackmer Pump Co., Grand Rapids, Mich.
E. W. Bliss Co., Canton and Toledo, Ohio and Hastings, Mich.
Centrifugally Cast Products Div., The Shenango Furnace Co., Dover, Ohio Compton Foundry, Compton, Calif.
Continental Gin Co., Birmingham, Ala.
The Cooper-Bessemer Corp.,
Mt. Vernon, Ohio and Grove City, Pa.

Crawford & Doherty Foundry Co., Portland, Ore. Empire Pattern & Foundry Co., Tulsa, Okla. and Bonham, Texas

Florence Pipe Foundry & Machine Co., Florence, N. J. Fulton Foundry & Machines Co., Inc.,

Cleveland, Ohio
General Foundry & Mfg. Co., Flint, Mich.
Georgia Iron Works, Augusta, Ga.
Greenlee Foundry Co., Chicago, Ill.
The Hamilton Foundry & Machine Co.,
Hamilton, Ohio

Hardinge Company, Inc., New York, N. Y. Hardinge Manufacturing Co., York, Pa. Johnstone Foundries, Inc., Grave City, Pa. Kanawha Manufacturing Co., Charleston, W. Va.

Kennedy Van Saun Mfg. & Eng. Corp., Danville, Pa.

Koehring Co., Milwaukee, Wis. Lincoln Foundry Corp., Los Angeles, Calif. Nordberg Manufacturing Co., Milwaukee, Wis. and St. Louis, Mo.

Palmyra Foundry Co., Inc., Palmyra, N. J. The Henry Perkins Co., Bridgewater, Mass. Pohlman Foundry Co., Inc., Buffalo, N. Y. The Prescott Co., Menominee, Michigan Rosedale Foundry & Machine Co., Pittsburgh, Pa.

Ross-Meehan Foundries, Chattanooga, Tenn. Sonith Foundries of FMC, Indianapolis, Ind. Standard Foundry Co., Worcester, Mass. The Stearns-Roger Mfg. Co., Denver, Colo. Valley Iron Works, Inc., St. Paul, Minn. Vulcan Foundry Co., Oakland, Calif. Washington Iron Works, Seattle, Wash. Dorr-Oliver-Long, Ltd., Orillia, Ontario Hartley Foundry Div., London Concrete Machinery Co., Ltd., Brantford, Ontario Otis Elevator Co., Ltd., Hamilton, Ontario

WRITE FOR YOUR FREE SINGLE COPY TODAY.

BULLETIN NO. 32
"MEEHANITE QUALITY CONTROL
ASSURES UNIFORM DEPENDABILITY."

Write today to Meehanite Metal Corporation, Department 2 B 714 North Avenue, New Rochelle, New York.

MEEHANITE®

For More Information Write No. 200 on Inquiry Card—Page 32-> Purchasing

MEEHANITE CASTING DATA

The engineering properties of Meehanite castings provide a dependable material of construction. Combining the best properties of cast iron and steel, all Meehanite castings are produced by controlled processes to meet specific service requirements. There are 26 different types manufactured under four general classifications: General Engineering, Heat Resisting, Wear Resisting and Corrosion Resisting.

The metallurgical composition and structure of each type listed below is accurately pre-determined in the molten metal. Regulation of the quantity and disposition of graphite and the adjustment of the microconstituents permits achievement of the required properties.

This manufacturing control results in Meehanite castings which possess high strength, uniform solidity, true elastic properties, toughness, vibration damping, excellent wear resistance, self-lubrication qualities, free machining characteristics and the capacity to heat treat. If you have a casting problem, consult a Meehanite foundry today.

CLASSIFICATIONS AND SPECIFICATIONS OF MEEHANITE METAL

			L ENGINEERING TYP			
Type	Tensile Strength Min. p. s. i.	Mod. of Elasticity p. s. i.	Compressive Strength p. s. i.	Shear Strength p. s. i.	Fatigue Strength p. s. i.	Brinell Hardness Section
GM	55,000	22,000,000	200,000	55,000	25,000	217
GA	50,000	20,000,000	175,000	48,000	22,000	207
GB	45,000	18,000,000	160,000	44,000	19.000	196
GC	40,000	17,000,000	150,000	40,000	17,500	192
GD	35,000	14.500,000	130,000	35,000	15,000	183
GE	30,000	12,000,000	120,000	30,000	13,700	174
GS GSF	80,000 60,000	24,000,000 23,000,000	160,000 120,000	65,000 55,000	35,000 20,000	207 190-250

HEAT RESISTING TYPES

Processed, according to type, to resist temperatures up to a maximum of 1650 deg. F. Tensile strengths at normal temperatures between 27,000 and 50,000 lb m s i Strength properties under elevated temperatures available on request

De	tween 27,000 and 30,000	io, p. s. i. Strength	properties under	elevated temperatures	available on	request.		
HA	50,000	20,000,000	175,000	48,000	22,000		223	
HB	40,000	21,000,000	162,000	42,500	19,000		300	
HC	38,000	18,000,000	160,000	40,000	19,000		300	
HD	38,000	18,000,000	160,000	40,000	18,000		300	
HE	33,000	15,000,000	145,000	34,000	16,000		223	
HR	30,000	10,000,000	*********	31,000	*********		223	
SC	27,000	17,000,000	130,000	28,000	20,000		300	

WEAR RESISTING TYPES

For resistance to hard surface wear. (Brinells to 578), a variety of Wear Resisting Mechanite castings provides types for specific wear problems. Poured under strict metallurgical control, physical properties are predetermined according to service requirements.

Туре	,	Condition	Tensile Strength - p. s. i.	Brinell Hardness Number to specification
	WAH	Heat Treated	Up to 70,000	200-600
	WA	Sand Cast	Up to 50,000	193-321
Modified	WH	Sand Cast	Up to 50,000	Up to 532
	WB	Sand Cast	Up to 50,000	300-532
	WBC	Chill Cast	Up to 45,000	Up to 500 on Chill Face
Standard	WH	Sand Cast	Up to 30,000	Up to 575
	WEC	Chill Cast	Up to 30,000	Over 444

CORROSION RESISTING TYPES

Used extensively in the chemical, metallurgical and oil refining industries to resist certain acids and chemicals.

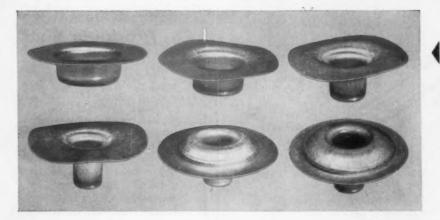
Туре	Tensile Strength p. s. i.	Modulus of Elasticity p. s. i.	Compressive Strength p. s. i.	Service	Brinell Hardness
CB ₃	45,000	19,000,000	160,000	Concentrated Acids	197
CB	45,000	19,000,000	160,000	Acids & Chemicals	187
CC	40,000	19,000,000	160,000	Atmospheric	192
KC	32,000	14,000,000	130,000	Alkalies	197

MEEHANITE BRIDGES THE GAP BETWEEN CAST IRON AND STEEL®

MEEHANITE METAL

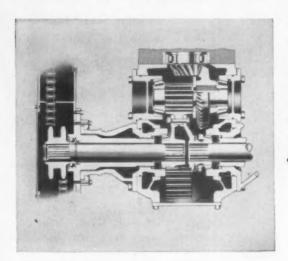
MEEHANITE METAL CORPORATION, NEW ROCHELLE, NEW YORK

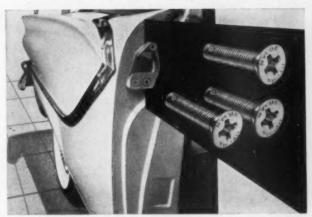




HERE ARE SIX STEPS of possibly the severest manufacturing tarture that a galvanized steel sheet can take. In its final form, it becomes the end piece of a muffler manufactured by the Mackenzie Muffler Company, Inc., Youngstown, Ohio. It is made out of Republic Continuous Galvanized Sheets. Despite the many deep drawing operations, the coating does not crack, flake, or peel. Republic Galvanized Sheets can do a profitable job for you. Clip the coupon and mail it in for more information.

SAFETY COMES FIRST—in the door latching of Ford cars. So Ford engineers have specified Republic Nylok Bolts to anchor the striker plate to the door post. Nylon pellet insert in bolt body forces a tight metal-to-metal lock between mating threads for a positive, vibrationproof clamping action. Republic Nylok Bolts are adjustable and reusable with no loss of holding power. Send coupon for descriptive folder.





EXCEPTIONALLY HIGH STRENGTH-TO-WEIGHT RATIOS plus resistance to fatigue, stress, shock, and impact are values of Republic Alloy Steels that equipment builders have been relying on for years. Engineers and metallurgists of the Adams Division, LeTourneau-Westinghouse Company, for example, spent thousands of hours on research and testing of all types of steels to find one that would reduce ultimate fatigue to an absolute minimum in the drive axle of their "660" Motor Grader. They selected Republic Hot Rolled 4340 Alloy Steel. This fine steel not only resists fatigue, but also is able to take high torque without a permanent set. Specify Republic Alloy Steels where strength and toughness must resist heavyduty roughness. Our metallurgists will help you.

REPUBLIC® STEEL

World's Widest Range of Standard Steels and Steel Products

REPU	BLIC ST	EEL CORF	0	RATION	
DEPT.	PH-5509				
1441	REPUBLIC	BUILDING		CLEVELAND	1, OHIO
	99/71				

- Send more information on:
- ☐ Continuous Galvanized Sheets
- ☐ Nylok Bolts and Nuts
- ☐ Alloy Steels

Title_

Name_

Company___

Address_

City.



This cigarette merchandiser,* because of its excellent design, is finding acceptance in many spots where vending machines were once refused.

Key to its ultra-modern styling is a brand selector panel that features 20 illuminated push-buttons made of Lancaster glass. Each jewel-like button is also a miniature display window.

Want to find out how custom-made glass and plastic components by Lancaster will give your product greater beauty and utility—for greater sales?

For immediate action and a copy of the new glass catalog, phone Olive 3-0311 or write Lancaster Glass Corporation (formerly The Lancaster Lens Co.), Lancaster 4, Ohio.



to brighten your product's future

For More Information Write No. 202 on Inquiry Card-Page 32

Products

(Continued from page 78)

In such a setup, the spindle may be positioned over any point within 10" of either side of the track anywhere along its length. The accessory consists of a carriage and column. These may be mounted, along with a standard 20-inch drill head and its raising mechanism, on a jib crane or similar type track. Rockwell Mfg. Co., Delta Power Tool Div., 490 N. Lexington Ave., Pittsburgh 8, Pa., will furnish the accessory.

Pressure Sensitive Adhesive Tape



A pressure sensitive adhesive tape, "Twin-Stick No. 9," is being manufactured as a double-faced type. The tape consists of a lightweight, porous, transparent paper carrier. The latter is coated on both sides with a clear, superaging pressure sensitive adhesive. The rolls are available with a dry edge where the release paper overlaps the adhesive film by 1/8". This allows for ease of removal of the release paper after applying to the surface. Durable Rubber Products Co., 609 W. Lake St., Chicago, Ill., manufactures the

Write No. 24 on Inquiry Card-Page 32

FOR MORE INFORMATION USE INQUIRY CARD PAGE 32

For More Information Write No. 203 on Inquiry Card—Page 32→ PURCHASING



Alcoa puts the metal where you want it

This shell for a Dyna-Empire, Inc. hearing aid button speaks loud and clear to everybody concerned with precision in screw machine parts. No larger than a penny, with walls only .006" thick, machined to within .001" tolerances, it proves just how precisely we put the metal where you want it.

Others tried to machine this "impossible" part. The scrap generation of 87 per cent and blistering heat in the thin sections licked them. Our solution: a special set of tools; a whopping knowledge of machining aluminum. And now these parts come shucking out at a tidy 300 per hour, The delicate pink

anodized color and bright buffed finish on the outside show our skill in secondary operations at Lancaster, Pennsylvania.

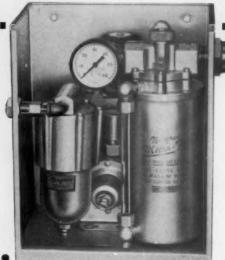
In screw machine parts as well as forgings, castings, extrusions and impacts . . . Alcoa puts the metal where you want it. To you this may mean fewer rejects or ingenious design solutions . . . less waste in production or a product that sells faster. Start now; write for Alcoa's Up-to-Dater, a starter file of ideas and design tips on Alcoa Engineered Products. Aluminum Company of America, 951 Alcoa Building, Pittsburgh 19, Pennsylvania.



Alcoa puts the metal where you want it — in castings, forgings, impacts, extrusions and machined parts.



Morgren MICRO-FOG°



NEW.

Compact, Tamper-Proof Cabinet Units

lubricate all bearings, gears, chains and cams on a machine

These new Norgren units provide ideal lubrication by applying just the right amount of air-borne oil fog to all bearing surfaces. The standard unit includes an automatic-drain air line filter, a solenoid valve, a pressure regulator, a pressure switch and a MICRO-FOG Lubricator... and provides the following important advantages:

74"

1 QT. OR 2 QT. OIL CAPACITY 200 OR 300 BEARING INCH RATING

- TAMPER-PROOF—Totally enclosed key-locked cabinet prevents tampering.
- SPLASH-PROOF Coolant and corrosive liquids cannot reach interior of enclosure.
- CONVENIENT TO SERVICE Removable one-piece top and side panel—secured by key lock—provides easy access for authorized personnel. Visual oil feed is proof of lubrication. Oil level gauge glass provided on lubricator.
- SAFEGUARDS MACHINE COMPONENTS Pressure switch actuates alarm or shuts down machine if air pressure fails.
- HEATER AND OIL LEVEL CONTROL OPTIONAL— Thermostatically-controlled Heater, for 1 Qt. units, maintains lubricant temperature and viscosity. Oil level control actuates alarm or stops machine when oil needs replenishing.

For complete information, call your nearby Norgren Representative listed in yourtelephone directory—or WRITE FACTORY FOR DESCRIPTIVE LITERATURE

C. A. NORGREN CO.

If it's Norgren... It's Dependable.

3414 SOUTH ELATI STREET

ENGLEWOOD, COLORADO

For More Information Write No. 204 on Inquiry Card-Page 32

Products

Sawing, Filing Machine Saves Tool Room Time



An ordinary mechanic can operate a contour sawing and filing machine now on the market. This simplifies all sawing, filing and lapping operations in the tool room. With the machine, dies and tools can be shaped to dimension faster and more accurately. Hand filing or other semi-finishing operations are eliminated. Oliver Instrument Co., E Maumee St., Adrian, Mich., make it.

Write No. 25 on Inquiry Card-Page 32

Boring Head Functions Automatically



A precision boring head is now available that can either: (a) finish bore a hole on the withdrawal stroke or (b) retract its tool-bit to prevent marking of the finished bored hole. Design of the boring head permits adjusting the tool-bit for wear without loosening or tightening any parts. Adjustments as fine as 1/10.000" are made in seconds. Boring head is a product of Briney Mfg. Co., 1165 Seba Rd., Pontiac, Mich.

Write No. 26 on Inquiry Card-Page 32

ECONOMIC FACTS ON FASTENERS



CORRECT FASTENER SELECTION AVOIDS COST PENALTY

- A fastener survey can reveal many opportunities for savings
- Cut costs without cutting strength or safety of connection

It's a mistake to pay premium prices for fastener properties you neither need nor use. While costly alloys have their place, most times the three grades of steel used in standard bolts and nuts can do the job and save money.

Example: Specification calls for alloy bolts with strength of 145,000 psi. But in assembly, they're tightened to just 30,000 psi. This gives no more strength to the joint than a far more economical Bright Cap Screw tightened to same load. The change would save a substantial sum.

Reducing size also saves. Remember that a fastener's job is to hold an assembly together. *Holding power* is what you should buy, rather than size or number of pieces.

Example: Product requires fasteners with a safe load capacity of 20,000 pounds. Bright cap screws of

% inch size will do it; but so will % inch High Tensile Bolts—at less cost. Actually, to get the same holding power as in \$1.00 worth of the high tensile fasteners, you would need \$1.50 worth of bright cap screws.

All this just touches on a valuable story for any manufacturer using standard fasteners. Worth a call to hear what it holds for you? Contact Russell, Burdsall & Ward Bolt and Nut Company,



Plants at: Port Chester, N. Y.; Coraopolis, Pa.; Rock Falls, Ill.; Los Angeles, Calif. Additional sales offices at: Ardmore (Phila.), Pa.; Pittsburgh; Detroit; Chicago; Dallas; San Francisco. Sales agents at: Milwaukee; New Orleans; Denver; Fargo. Distributors from coast to coast.



SPIN-SEAL* screws give leakproof fastening

for flat or curved sheet materials

Here is a new type of composite fastener that seals by means of a unique flow-in sealant and washer.

Concave in shape, the heat treated springy washer confines and controls the flow of sealing compound. Tightening the screw forces sealant into various spaces around (1) threads, (2) head, and (3) clearance hole to give hermetic sealing.



When screw is tightened the compound seals clearance hole and top thread; between washer and surface; between head and washer.



The washer has ability to conform to curved surfaces and still seal securely against hydrostatic pressures and wind driven water.

ONLY THE SCREW TURNS

Washer does not turn with the screw. This prevents twisting or tearing the sealing "gasket", marring of polished surfaces, or gouging of painted finishes.

The flow-in gasketing compound is plastic rather than elastic. Stable and non aging, it won't split or ozone-check under pressure. It gives controlled flow into clearance spaces. Compounds are available to seal out water or oil.

Send for Bulletin SS-1A. *T.A.
† U.S. & Can. Pars. Pend.

RB&W FASTENERS-STRONG POINT OF ANY ASSEMBLY

If you're serious about economizing, start here





This company eliminated the typical messy condition at left and saved \$4,000 annually on maintenance by switching from powdered soap to \$BS-60 Cream Deodorant soap. (Above photos both taken immediately after shift change.)

Waste soap is not the only needless expense in washrooms. Waste maintenance is even more costly. The company in the picture at right above saved some \$4,000 a year in maintenance men's time by switching to SBS-60, the cream-type cleanser. How did SBS-60 accomplish this? Easy! One SBS-60 dispenser replaces six or more conventional powdered-soap dispensers. And the SBS-60 dispenser need be filled as little as once every three days, opposed to as often as three times daily for powders. In addition to all this maintenance time saved, of course, there is the tremendous saving in soap itself, for SBS-60 is almost impossible to waste. If you really want to cut costs, start by investigating this new concept in cleansing economy: SBS-60 Cream Deodorant soap! Write for details to dept. 58-I 5.

the washword of industry





SAGINAW, MICH. • Los Angeles, Calif. • Newark, N. J. CANADA: Chemical By-Products, Ltd., Rexdale, Ontario

For More Information Write No. 206 on Inquiry Card-Page 32

No Gifts, Please

(Continued from page 61)

fact that all discouraging letters, as pointed out in the foregoing, are not alike and that all corporations do not send anti-gift decrees. There is no overall hard and fast rule. How then, does one formulate a policy?

Love that Martini

On any night of the year walk into "21" in New York, the Pump Room in Chicago, the Mark Hopkins in San Francisco, and umpteen hundred other spas scattered in between and you will enter domains inhabited by buyer and seller, vendor and customer. It is as commonplace as walking through a park.

The friendly martini has become de rigueur in the marketplaces of America, and the martini in a luxurious atmosphere is doubly appreciated. Of course, it ought to be. The tabs that can be chalked up in the more elegant bistros of the country in the name of business have baffled many a corporate treasurer; vet no sane executive today would dream of affixing his signature to an edict forbidding his employees-specifically, his purchasing representatives-from breaking bread with a reputable vendor.

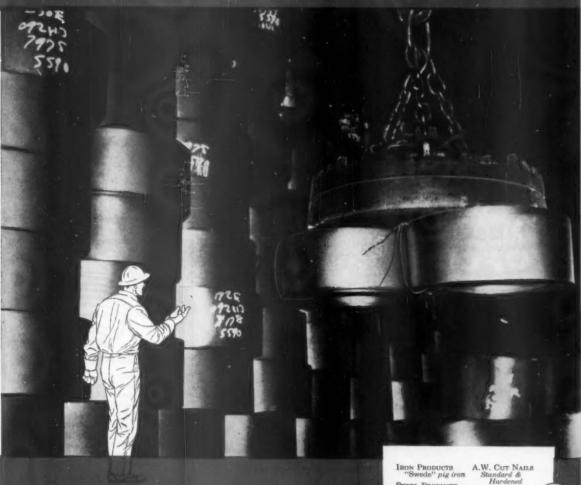
Night on The Town

As anybody who has been through the mill is only too keenly aware, an evening on the town can come to almost any figure depending on the zest, endurance, tastes and capacities of those involved. Let's say I take Mr. and Mrs. P.A. Zilch to the theater (fifth row center, naturally), dining beforehand at a first class gourmet-recommended inn and catching a nightcap later at a cozy pub with music. It's no trouble at all to emasculate a C-note or better-much better. However, if I send the same guy a ten dollar Christmas gift, I'm overdoing it by his firm's code of ethics. There's no sense in this and an alarming disparity of proportion.

(Please turn to page 88)

How to reduce Investment in costly Steel Inventories

houses with top quality products which help them meet customer requirements. Call your nearest steel warehouser to-



STEEL PRODUCTS PEEL PRODUCTS
Plates (sheared)
A.W. Dynalloy
(high strength
steel)
Hot rolled sheets
Hot rolled strip
Cold rolled strip
Cold rolled strip

ROLLED STEEL A.W. ALGRIP abrasive A.W. SUPER-DIAMOND pattern

COAL CHEMICALS

MINE PRODUCTS

Foundry, industrial & metallurgical

PENCO METAL PRODUCTS DIVISION Steel cabinets, lockers & shelving

The only reasonableness that can be applied is that the account or potential certainly better merit having a hundred bucks squandered on it—or that I am so enthralled by the excellent company provided by my charming guests that I consider the evening a worthy expenditure. I will not dwell on this latter explanation lest the sheerness of my chimerical objectivity be embarrassingly exposed. It is so infrequent!

So far this discussion has been confined to rather picayunish gifts -a single small box of cheese or a bottle of spirits selected as symbols. Despite the modest outlay per unit, they are on the verboten list according to the definitions outlined in the foregoing. What then, of the more significant items? The bottle of whiskey often becomes a whole case. The box of cheese can grow into a \$100 gift bond at a department store. Then there are Hi-fi and TV sets, sterling platters, pianos for little Susie or a thoroughbred Dalmatian.

Frankly, I consider this range of business gifts in the eyebrow-



For More Information Write No. 209 on Inquiry Card—Page 32 PURCHASING



New right arm of rail and rubber for Shippers!



→ B&O trailer-on-flat-car freight service "arms" your distribution plans with dependable flexibility. TOFCEE trailers pick up your freight load where it is. Trailers ride on fast freights that maintain all-weather schedules on hauls up to a thousand miles and more. TOFCEE loads ride right off cars and roll to consignee's plant or warehouse.

Worry is minimized through prompt notification of shipper and receiver when any schedule is interrupted. Try this new right arm to reach your customers! Ask our man!



BALTIMORE & OHIO RAILROAD

Constantly doing things-better!

For More Information Write No. 208 on Inquiry Card-Page 32

lifting category. At the very minimum it is overdoing it. Many such gifts must surely be a reward for favors extended. Whereas, I think many corporations can go too far in not wanting employees remembered, I am in full agreement in not permitting obvious rewards. The reward for a job well done should come from the employer himself.

There is no doubt that the whole Christmas gift problem and the associated poser of business entertainment is inter-related with the economic status of the people with whom one is doing business.

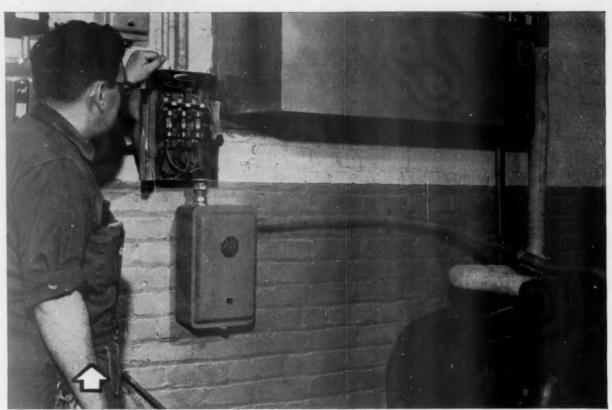
It is in this stratum of the profession that the malpractices of vuletide remembrances flourish. While I cannot agree that a modest gratuity is necessarily an evil or corrupting influence here, the limit should be low enough to assure inconsequence. Many firms are in a field of manufacture whereby it is possible for them to issue an unusual item which reflects in whole or part the manufacturing skill and prowess of the donor. This is utilizing Christmas for advertising purposes - certainly not a bold or new step in this century of the big American push-but aside from this apparently slight consideration there isn't a shred of impropriety.

Token Gifts Appreciated

Real industrial impeccability is assured, corruptibility denied, and the overly aggressive vendor thwarted when the customer's ramparts are manned by well paid men of competence, principle, sensitivity and ethical devotions. I know many. There isn't anything I could possibly do for them at Christmas or any other time to contribute to their mode of living. They have nice homes, motor cars, memberships in clubs and the ability to indulge their tastes and fancies. The mere thought of commercial seduction is ludicrous. However, if I do send a token remembrance, it is acknowledged with appreciation.

What then, is the proper procedure with Christmas gifts in the business world? That's easy. Most intelligent Americans practice it every day. Use discretion and don't go overboard.





Orwille L. Welsh ASST. CHIEF ENGINEER, CONTINENTAL BAKING CO.



"Experience proved to us, Fusetron Fuses could save us money and provide safer protection." . . . Orwille L. Welsh

ASST. CHIEF ENGINEER CONTINENTAL BAKING CO. TOLEDO, OHIO

CASE 1

CASE 2

"A refrigeration compressor of ours was frequently being shutdown because the 60 amp. protection we used just could not hold the starting currents

"After reading over Fusetron dual-element fuse literature sent to us by our company headquarters, we tried them out with great success. In the past twelve months, we have not had to go near the switch or open its cover.

> "In another case. Fusetron fuses saved us a considerable amount of money. We installed 600 ampere Fusetron fuses in

parallel in our 1200 ampere entrance switch, rather than using the more expensive mechanical type of protective device.

"Personally, I am confident we now have better protection than we could have had with other types of protective devices."

Here's why FUSETRON dual-element fuses provide safer, more dependable and money-saving protection . . . FUSETRON dual-element fuses provide 10 point protection against electrical troubles. This is unlike circuit breakers or ordinary fuses which, except in rare cases, protect only against short-circuits.

IN ADDITION:

Fusetron fuses require no mainte-

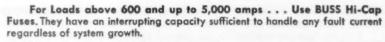
nance or recalibration. They are calibrated at the factory by engineers. Once properly installed, they require no inspection or down-time necessary on mechanically operated devices. There are no hinges, pivots or contacts to stick or get out of order. Dust, corrosion or oxidation cannot increase a Fusetron fuse's capacity or lengthen its blowing time.

After years of inactivity, a Fusetron fuse will give the same safe, dependable protection if called upon to open as it would have on the day it was installed.

Fusetron fuses have high interrupting capacity. FUSETRON fuses can safely interrupt severe shortcircuit currents and are adequately safe to meet future circuit growth.

Fusetron fuses save on installation costs. Because their long time-lag prevents them from opening needlessly on motor starting currents or other harmless overloads, Fusetron fuses can be installed in sizes to approximate the load current. This protects against waste of space and money by permitting use of proper size switches and panels.

Why Risk Losses! One needless shutdown . . . one lost motor . . . one destroyed switch or panel . . . one burned out solenoid . . . may cost you far more than replacing all other types of protective devices throughout the entire installation with Fusetron dual-element fuses.



They can be coordinated with Fusetron fuses on feeder and branch circuits to limit fault outages to circuit of origin.

for more information write for BULLETIN FIS on Fusetron fuses.

BULLETIN HCS - BUSINESS. BULLETIN HCS on BUSS Hi-Cap fuses.

for safe, modern money-saving protection install FUSETRON dual-element FUSES and BUSS Hi-Cap FUSES throughout entire Electrical System!

BUSSMANN MFG. DIVISION, McGraw-Edison Company University at Jefferson, St. Louis 7, Mo.



Office Equipment and Supplies

New Office Brings Increased Efficiency



President's office and other top executive offices are located on first level of building. Each executive office has door to terrace.



Interiors of new Reynolds Metals Company office building includes world's largest Hexcel aluminum honeycomb ceiling.



Aluminum file cabinets were specially designed. Cabinets are black anodized aluminum, with drawer faces clear anodized.

A NEW multi-million dollar office building—an aluminum showcase in a Virginia garden setting—will be formally opened this month as the new home of Reynolds Metals Company.

Designed by Skidmore, Owings and Merrill of New York, the building contains 1,235,000 pounds of aluminum, used in many ways for economy, efficiency or beauty.

Aluminum uses include the world's largest system of automatic sun louvers, movable office partitions, acoustical and light-

diffusing ceilings, a new line of aluminum office furniture, aluminum yarn draperies and carpeting, and most of the hardware.

From the exterior, almost everything that can be seen is either aluminum or glass.

Office space on the second and third levels is laid out on a precise 5'2" module so that the movable Hauserman aluminum wall partition can be rearranged to meet changing space requirements of company departments.

The suite of executive offices is

connected with motorized aluminum sliding doors, operated by push buttons. These offices and other first level rooms feature panels of cherry wood and are adorned with original paintings by Picasso, Le Corbusier and other modern masters.

There are also a library, barber shop, four special dining rooms, two completely equipped kitchens, a health center and solarium, and special duplicating, mail, communications and other service rooms.



LOUIS W. DAWSON, President, Mutual Of New York, explains why:

"These papers must last 100 years"

"Passed from generation to generation, our life insurance policies may have to last 100 years or more. Time is the ultimate test of paper quality—and in these policies we use cotton fiber papers exclusively."

For every important use . . . for impressive letterheads as well as lasting records . . . successful businessmen choose cotton fiber papers.

Flexible, white fibers of purest cotton, crafted with expert care and precision equipment, cre-

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Be sure to choose papers made with cotton fiber—25% minimum up to 100% in the finest grades. Write for booklet, "What Every Businessman Should Know About Paper—Today!" ©Cotton Fiber Paper Manufacturers, 122 E. 42nd St., N.Y.C.



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LOOK FOR "COTTON" OR "RAG" IN THE WATERMARK OR LABEL
For More Information Write No. 212 on Inquiry Card—Page 32

Office Equipment



Additional features for their line of steel desks, tables and companion units were recently announced by the Bentson Manufacturing Co., Aurora, Ill. Equipped with stainless steel top edges, perforated back panels, and cast aluminum contour legs, the products have been designed to avoid the bulky look without resorting to extreme styling.

Write No. 27 on Inquiry Card-Page 32

The line of desks by Jasper Office Furniture Company, Jasper, Indiana, brings modern styled basic wood desks to the general office at moderate prices. The fea-

tures of the series include selfedged plastic tops, file drawers on full progression extension slides, designed to be interchangeable in the left or right hand pedestal and box drawers operating on permanently lubricated runners.

Write No. 28 on Inquiry Card-Page 32



A new one-writing pegboard payroll system was introduced recently by The C. E. Sheppard Co., of Long Island City, New York. The new system is built around a center line writing feature which enables completion of check or cash pay statement, payroll journal and employee's earnings record, including cumulative earnings. The pegboard has been designed so that, in addition to the new payroll system it will also accommodate the various other Sheppard accounts payable and receivable systems.

Write No. 29 on Inquiry Card-Page 32



Corry-Jamestown Mfg. Corp., Corry, Pa. has announced the introduction of a new group of executive desks and modular pieces Some of the unique features of this new line include dramatically-styled hardware, legs, and top design by one of the country's leading industrial designers. The line will include private tables and secretary-receptionist desks.

Write No. 30 on Inquiry Card-Page 32



to a desk

small investment—BIG RETURN

BOSTON CHAMPION

PORTABLE PENCIL SHARPENER

- 4 DECORATIVE COLORS
- · less time wasted
- better efficiency
- less than 1½c a day for one year with long life ahead

Send for free comprehensive report on sharp-eners, Booklet T.

C. HOWARD HUNI



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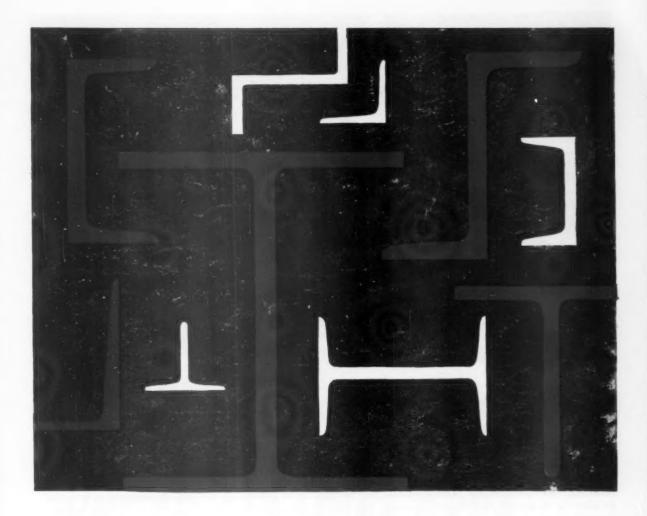
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United States Steel



Association News

Berry Addresses Carolinas-Virginia P.A.'s

THE downturn in general business re-focuses attention on the so-called "buyer's market."

In a free economy, costs determine prices, but conditions of supply and demand help to determine costs, especially in the declining phase of the business cycle. Under present built-in governmental controls and rigid labor costs, with business men and even orthodox economists, who should know better, demanding "that the government do something," basic economic factors strained, and their effects delayed. Fundamental economic principles, however, have not been and can not be repealed.

Various speakers at the NAPA Convention in Chicago indicated a recognition of stubbornly held prices as a major factor in the extension and deepening of the present recession.

George A. Renard, our own honorary member, said: "Our problem is to secure lower costs through better purchasing . . . Cost is what we pay, but value is what we buy."

John A. Hill, president of Air Reduction, said: "There is a good



James M. Berry, purchasing agent, Vick Chemical Co.

side of the recession . . . It means better products and lower prices . . . a cure for the ills accumulated by excesses of the boom . . . a golden opportunity for purchasing to cut costs."

Dr. Louis J. DeRose, our advanced purchasing course leader, pointed out, in a brilliant discussion of price, that prices used to be the corrective force when supply and demand got out of balance, but that since World War II we have developed a cost-

plus philosophy, caused in large part by the huge and growing government. He warned that the present recession will not be ended by government ballyhoo nor price supporting. Cost-plus habits are pretty well ingrained, and buyers must negotiate hard to get prices down.

The P. A.'s Challenge

In essence, we as purchasing agents are presented with our greatest challenge in cost reduction or profit improvement, in the area of materials management, which is, after all, the major factor in the manufacturing cost of our finished products. We are faced with the problem of a profit squeeze, a narrowing of the margin between cost and selling price. And we also face the same problem in our manufacturing costs. It becomes not only a matter of self-interest, but actually a patriotic duty to work for, and insist upon lower prices for the commodities we buy.

This is an abstract of a talk given by James M. Berry, purchasing agent, Vick Chemical Co., before the Carolinas-Virginia Purchasing Agents Association at Graystone Inn, Roaring Gap, N.C.

Wisconsin University to Combat Recession With Purchasing Management Conference

The scare idea of recession just isn't so, according to a top managerial training specialist at the University of Wisconsin. William Stilwell, assistant director of the University of Wisconsin's Management Institute, maintains that the economy went through a "period of adjustment," one byproduct of which has been an increased recognition that the principle of "managerial growth" must be applied in the purchasing field. According to Stilwell, "the day is

fast approaching when the P. A. will be required to drop his role as a doer and technician and accept policy-making responsibilities on a top management level."

"All this represents a tremendous challenge for the P. A.," Stilwell says. "He's going to have to become a 'manager', and just how good his management is will become increasingly significant in the measurement of a company's profits. In other words, the P. A. will be called a hero or a bum depending on how well he handles the new demands that are being made of him."

The 1958-59 kick-off P. A. conference is scheduled for the Wis-

consin campus in Madison on Oct. 2 and 3, and will tackle the problem of value analysis. Discussion leader for the program will be C. D. Francisco, midwest editor for Purchasing magazine. Other conference sessions will include one on the human phase of purchasing, Nov. 6-7: a look at current purchasing practices, Dec. 4-5; improvement of ability to communicate, Mar. 5-6; and selfevaluation of performance, May 14-15. In addition, a workshop on vendor relationships will be held on campus in Madison on Oct. 13-14, and one on purchasing techniques is scheduled for Milwaukee on Feb. 10-12.



UNITED AIR LINES ADDS TWO MORE CARGOLINERS

Here's how you can use them!

They'll help you speed shipments of urgently needed parts, keep promises on sales commitments, receive on-time delivery of critical material, and improve customer relations.

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Radar on every United plane assures a smoother ride for fragile shipments and insures on-time dependability.

New schedules effective August 11 and September 8.



For more information on these new flights or on United's "All Radar" fleet and door-to-doorservice, call the nearest United Air Lines representative or write Cargo Sales Division, United Air Lines, 36 South Wabash, Chicago 3, Illinois.

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THE BUNTING BRASS AND BRONZE COMPANY • TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES

For More Information Write No. 217 on Inquiry Card—Page 32

Association News

Northwestern Ass'n Elects New Officers



President J. A. Henchy

New officers were elected by the Purchasing Agents' Association of Northwestern Pennsylvania. The election took place at the Corry Country Club, Corry, Penna.

J. A. Henchy, Dresser Mfg. Div., Bradford, Penna. succeeded H. W. Carlson of Rane Tool Co., Jamestown, N.Y. who became



Turn plastics problems into answers—like magic! You'll get top-quality molded parts . reliable on-time deliveries . . expert design help with one call to Chicago Molded. For here's the skill from 38 years' experience . . unbeatable production facilities . . engineers and designers to help eliminate costly, unnecessary frills. So for the help and service you need—call:

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1025 N. Keimer Ave., Chicage \$1, III. Phone: Dickens 2-9000



For More Information Write No. 218 on Inquiry Card—Page 32 national director. Mr. Henchy has been with Dresser Mfg. Div. for the past seven years as a buyer. He is the father of five children.

Other officers elected were 1st Vice-President Frank G. Cruickshank, Struthers - Wells Corp., Warren, Penna.; 2nd Vice-President Glenn Warner, Raymond Mfg. Co., Corry, Penna.; Secretary Peter A. Schessler, Jr., Bovaird & Seyfang Mfg. Co., Bradford, Penna.; Treasurer O. R. Hagan, Stackpole Carbon Co., St. Marys, Penna.

Directors named were: Douglas E. Benson, Blackstone Corp., Jamestown, N.Y.; Orrin E. O'Connor, Quaker State Oil Refining Co., Oil City, Penna.; Howard Edmonds, W. R. Case & Sons Cutlery Co., Bradford, Penna.

At the meeting the annual salesmen's party was discussed and it was decided that it would be held on September 5th at the Moon Brook Country Club, Jamestown, N.Y.

North Alabama Group Meets

President Larry Highfill, Reynolds Metals Company (Alloys Plant), presided at the monthly dinner meeting of the North Alabama Branch of the Purchasing Agents Association of Alabama, at the Lyon's Hotel in Decatur, Alabama. Mr. William M. Spencer III, president of Owen Richards Co., Birmingham, Alabama was the speaker. First Vice President John Fisher, Chemstrand Corporation, Decatur, Alabama introduced the speaker.

Mr. Spencer's talk was entitled, "What Management Expects of Purchasing in a Recession". It was an outstanding talk and was regarded by all present as "tops", because it clearly outlined point by point purchasing's responsibility to top management at all times.

J. N. Day, Jr. Moore-Handley, President of the Purchasing Agents Association of Alabama, attended this meeting. He gave a most informative outline on the plans and progress of all the Associations committees. He also announced that North Alabama

(Please turn to page 102)

"KEX" beats all.... meets all wiping needs with the right towel for every job!



The report on "KEX" INDUSTRIAL TOWEL RENTAL SERVICE from Columbia Steel & Shafting Company of Carnegie, Pennsylvania, says: "We've had "KEX" since 1952 . . . it's proven useful and beneficial! The uniformity of the towel, its superior wiping qualities, plus the regulated pick up and delivery is advantageous to production and extremely satisfactory to us."

- The "KEX" Service is engineered to suit your needs—provides the right size, right type towel for each individual job need.
- Saves countless man-hours of labor—through proper installation and systematic servicing.
- Regular pickup and delivery increases efficiency—no timeconsuming disposal problems, reduced fire hazard for extra safety.
- "KEX" towels absorb up to 6 times their own weight—are uniformly bound with no loose ends to catch in machinery, are germfree and strong enough to withstand hardest use.



Investigate the benefits of "KEX". "KEX" is a national service available through locally owned independent franchised dealers like Penn Overall Supply Company which services Columbia Steel & Shafting.



See "Wiping Cloths" or write to "KEX" National Service, 295 Fifth Avenue, New York 16, N. Y.

"KEX"

REG. U.S. PAT. OFF.





It isn't "KEX" unless it's imprinted with the "KEX" name

For More Information Write No. 219 on Inquiry Card—Page 32
For More Information Write No. 220
on Inquiry Card—Page 32

Now, for the first time, sanding that's really

DUSTLESS

NEW BLACK & DECKER

vacuums dust for faster

You get unique vacuum hook-up!

Many outstanding features!

Top sanding of most materials!

Imagine sanding glass, plastic, metals, wood without particles of dust flying in all directions!

The new Black & Decker 3" Heavy-Duty Dustless Belt Sander picks up dust from your

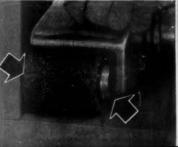
PERFECT, EASY CONTROL of new B&D H.D. Belt Sander results from this palm-fitting knob positioned to give you complete command over path of sanding at all times. QUICK BELT CHANGING: Just flip the lever, slide old belt off... new belt on. With B&D's exclusive dustless operation, belts last longer as belt clogging particles whisk away! GREASELESS, SPOTLESS WORK: Exclusive B&D gearless transmission requires no lubrication, hence there's no grease or oil to spot working surface!

GETS INTO TIGHT SPOTS: Flush side permits working against verticle surfaces. Exposed front belt pulley lets you work on curved surfaces and small radii.











H.D. BELT SANDER

work . . . longer belt life!

work as fast as it is formed—whisks away beltclogging particles. You'll like how much more work you can do . . . the finer finish you'll get . . . because your sanding belts are kept clean and sharp. Check the features at left, then mail coupon for a free demonstration. Once you've seen it in operation you'll want it for your production or maintenance!



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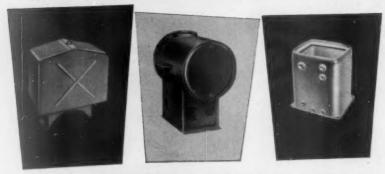
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For More Information Write No. 221 on Inquiry Card-Page 32

Association News

(Continued from page 99)

Night will be observed at a dinner meeting in Birmingham on Friday, November 14th. The Purchasing Agents of Alabama Association and the North Alabama Branch will have the opportunity of attending a plant tour of Chemstrand Corp. in Decatur, Alabama on October the twenty third.

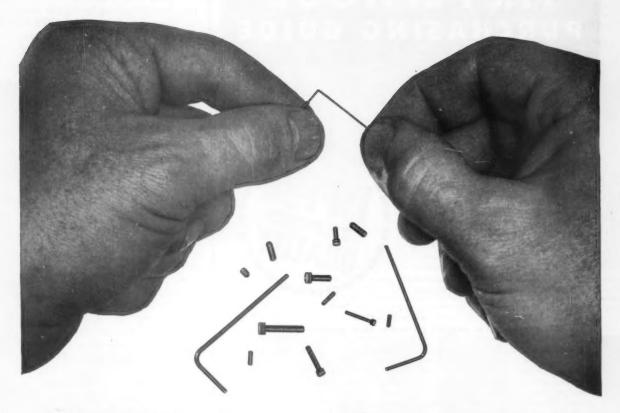
NAPA Appointments

The following appointments to the national committee on fuel oil have been made by Chairman Frank J. D'Antonio: C. O. Minot, A. H. Bull & Co., regional chairman, region No. 2, Seaboard area; J. S. MacKillican, Aluminum Company of America, member of committee, region No. 2, Seaboard area.

Eastern New York Ass'n Elects Officers

The Purchasing Agents Association of Eastern New York held its annual election of officers. New officers are: National Director William H. Flint, Cluett, Peabody & Co., Inc., Troy, N.Y.; President Eugene L. Hunt, Albany Castings Co., Inc., Voorheesville, N.Y.; First Vice-President Clarence E. Anderson, Ford Motor Co., Green Island, N.Y.; Second Vice-President Austin A. Woodward, The Woodward Co., Albany, N.Y.; Secretary James B. Montgomery, General Aniline Works & Film Corp., Rensselaer, N.Y.; and Treasurer William C. Bryant, Jr., National Commercial Bank & Trust Co., Albany, N.Y.

The new executive committee members are: J. Leland Hodgkins, H. B. Kimmey Co., Inc., Albany, N.Y.; Richard A. Hunsdorfer, Albany Steel & Iron Supply Co., Albany, N.Y.; Philip E. Tobias, Glen Falls Portland Cement Co., Glens Falls, N.Y.; Edward S. Waters, General Electric Co., Schenectady, N.Y.; and Mark B. Patten, Jr., Behr-Manning Co., Troy, N. Y.



If you're miniaturizing . . . you'll save space, time and money with Allen Minicaps and Minisets (#0 thru #3 dia.)

These miniature Allen Hex Socket Cap and Set Screws will let you scale down your product sizes even farther. They're made from Allenoy special alloy steel—so strong that you can safely specify fewer screws or smaller sizes.

Allen Minicaps and Minisets are tiny, but very tough! — true Allens, with deep, clean, strong sockets and uniform Class 3A threads. Minicaps have the Allen knurled "Grip-Head" and are trimmed both on top and under the head, for tighter fit and better appearance. Minisets have the improved

small-cup Allenpoint that drives deeper and holds tighter.

Because sockets are uniformly true hexagon shape, the key or driver fits tight — makes starting much easier, saves a lot of time in assembly.

Diameters of these miniatures run from #0 through #3. Minicap lengths run from ½" through ½", and Miniset lengths from ½" through ½". Also standard in stainless steel. Your Industrial Distributor has them now. He'll show you why these Allens — like all Allens — hold tighter and last longer. Or write for information and samples.

Use Minicaps and Minisets wherever you need dependable fastening in very small assemblies:

TV, radio and telephone equipment • Guided missiles, rockets
• Panel meters • Electro-mechanical devices and servo-systems • Computers • Control and operating mechanisms for relays
• Cameras • Instruments

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MANUFACTURING COMPANY
Hartford 2, Connecticut, U.S.A.







DFPA grade-trademarks attest quality, performance and value. They appear only on plywood manufactured, inspected and laboratory-tested under the DFPA quality control program to assure conformance to U.S. Commercial Standard quality requirements.



2. Choose the right grade for each job

DFPA quality-tested fir plywood comes in two types: 1. Exterior (waterproof glue for permanent outdoor exposure); 2. Interior (moisture-resistant glue) for use indoors, temporary outdoor uses and sheathing.

Within each type are appearance grades to meet the exact needs of any given job. Most popular grades are shown below: (other grades including panels made of other western softwoods, also available)

TYPICAL USE	EXTERIOR-TYPE (Waterproof glue)	INTERIOR-TYPE (Moisture-resistant glue)	
Where appearance of both sides important. Cabinet doors, single thickness walls, etc.	© EXT-DFPA·A-A		
Where only one side will be seen. Siding, paneling, signs, fixtures.	PlyShield® (A-C)	PlyPanel® (A-D)	
Special concrete form grades. Both faces sound, solid, smooth.	Ext. PlyForm® (B-B) Maximum Ro-use	Int. PlyForm® (B-B) Multiple Re-use	
Unsanded structural and maintenance panel. Sheathing, crating, temperary screening.	Exterior Glue PlyScord® (C-D)	PlyScord® (C-D)	

SIZES: Standard fir plywood thicknesses are from $^14''$ through $^84''$; standard size is 4 wide, 8 long. Other thicknesses and sizes are also available, including "king-size" scarfed panels up to 30 and 50 long.

TEXTURED FIR PLYWOOD — Fir plywood comes in several smart textured panels for special decorative applications such as siding, paneling, displays and fixtures. These include Texture One-Eleven Exterior plywood (deep parallel grove pattern, shiplapped edges) and panels with attractive brushed, striated, or embossed surfaces.

OVERLAID FIR PLYWOOD — is Exterior fir plywood with resin-fiber overlay permanently fused to one or both sides of panel. High density is hard, glossy, abrasion-resistant (use for long-lasting signs, shelving, concrete forms); Medium density overlaid plywood is smooth, with texture similar to drawing paper (ideal paint base for signs, fixtures, siding).



FREE WALL HANGERS — Handsome 18"x33" wall hanger. Handy fir plywood grade-use-specification guide. Order one for everyone in your firm who specifies fir plywood. Also available, specification portfolio. Includes detailed description all grades, sizes, specialty panels, Commercial Standards requirements. Offer good USA only. Douglas Fir Plywood Assoc., Tacoma 2, Wash., Dept. 185.

For More Information Write No. 223 on Inquiry Card-Page 32

(Continued from page 62)

- (5) Unit saving by larger purchase is 6¢ - 5¢ - 1¢
- (6) Annual saving by larger purchase is 600.00
- (7) Read the \$1,700 on the vertical scale (take 17) and lay a ruler horizontally
- (8) Read the \$600 on the horizontal scale (take 6) and lay a ruler vertically
- (9) These rulers cross at a return value greater than 0.30 which we may, arbitrarily, say we want as the minimum return on invested working capital. Therefore, the large quantity purchase is warranted.

In borderline cases, or when considering inexpensive commodities, the value of a reusable container, or the cost of returning a container to the supplier must be taken into consideration in determining net delivered cost in (1) and (2). This may differ with the two quantities bought. The amount of deposit on the containers must also be included in (1) and (2), but not in (5) if refundable.

The chart has been developed by substituting arbitrary values for R and (Q-q) and determining values of Sa in the following equation:

Formulation:

Investment return = Annual dollar saving

Avg. dollar inventory increase or R = SA 2 SA 2 SA

Q-a

R is the investment return rate Sa is annual dollar saving

- Q is the delivered value of smallest quantity purchase necessary to obtain the price advantage
- q is the delivered value of the smallest practical purchase which will adequately supply the plant and not obtain the price advantage.
- I is the average delivered value of inventory under quantity buying, Q*.

9

i is the average delivered value of inventory without quantity buying, q*.

2

For More Information Write No. 224 on Inquiry Card—Page 32→ PURCHASING

How to cut costs, improve product design with stainless steel close-tolerance castings

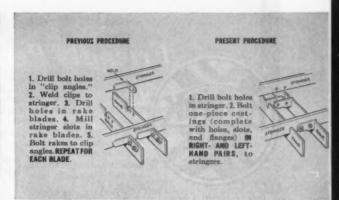
Cooper Alloy design collaboration with advanced casting techniques can simplify your fabrication, cut your costs. Here's how:



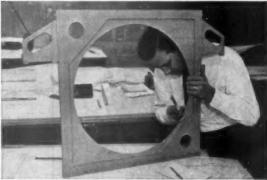
Casting of intricate parts: Jet engine afterburner component, cast for Pratt & Whitney Aircraft by Cooper Alloy, is a tangle of projections and cavities. Required, however, were the most precise dimensions to make for automatic precision machining. Shellcast® ahell coring and CO₂ process cut down rejection and machining costs.



Strength and quality: Castings stronger than forgings! These Cooper Alloy nuclear service fittings possess high-temperature yield strengths 20% higher than minimum code specifications. Tough quality requirements have been met and bettered on a regular repetitive quality basis.



Part redesigned, simplified, assembly costs lowered. Classifier rake blade, Shellcast® by Cooper Alloy for Dorr-Oliver Inc., was originally made by welding cast and machined elements. Close-tolerance, smooth-surface shell castings made possible design change to one-piece cast unit, eliminating welding and much of the assembly costs.



Casting of thin-walled close-dimensioned parts. Tennessee Eastman filter frame plate previously required a good deal of careful milling on thin inner web. Combined use of shell core in a sand mold held tolerances, eliminated milling operation.



Product improvement: Gear lugs on adjusting ring for Manning, Maxwell & Moore pressure safety relief valve, formerly sand cast, are now being produced directly by Shellcast* process. Dimensional accuracy possible with shell castings permitted redesign of part to give more lugs, finer adjustability in use.

If you haven't looked over your fabrication and assembly costs lately, check the unusual cost-saving techniques listed in the capsule stories shown above. They are typical of Cooper Alloy advanced casting know-how. Many parts and assemblies that you probably haven't even considered as makable by castings, can be now by Cooper Alloy, specialists for over 35 years in casting only stainless steel.

Want more information? To learn more of how Cooper Alloy know-how can help cut *your* manufacturing costs, write for our free 16-page booklet, "Cooper Alloy—Pioneering in Stainless Steel." Also available, information on the other problem-solving Cooper Alloy products listed below.



Corporation • Hillside, New Jersey



Only Continental is made of KONIK STEEL for greater tenaile strength and increased rust

less cost, because it lasts longer. Ad less Fest. 1 50

Write for PLANNED PROTEC-TION, Shows 10 styles, 25 uses,



CONTINENTAL STEEL CORPORATION . KOKOMO, INDIANA

For More Information Write No. 225 on Inquiry Card-Page 32





For More Information Write No. 227 on Inquiry Card-Page 32

(Continued from page 72)

the buyer in the absence of some invalidating deception or overreaching by the salesman in secur-

ing the signature."

Purchasing agents are well advised to beware of reliance on any representation of a salesman, not confirmed in writing by a responsible executive of the seller's company, where forms are used denying the authority of the agent to warrant. As an indication of the pitfalls in which a buyer can be involved, it was held in Advance Thresher Co. v. Roger (Minn.) that the buyer could not enforce a written agreement signed by the salesman that purchase was conditional on test of the machine after delivery. It appeared that the buyer had signed seller's printed order blank which expressly barred representations not contained in the form. The court agreed that this was a hardship case, but concluded that the law on this point is inflexible.

Recommendations

A. Salesmen generally have authority to warrant their company's product, but this is often limited to the normal practice and custom prevailing for the particular product in the buyer's territory. Any unusual warranty desired by the buyer should be obtained in writing from the home office of the seller.

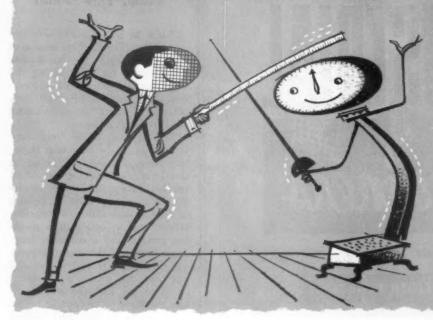
B. District sales managers and general sales managers have broader authority to make warranties than local salesmen. In case of doubt, obtain written confirmation from management level.

C. Exercise care in relying on warranties made by brokers or manufacturers' representatives unless clearly contained in advertising or catalogs, or confirmed by the seller's home office.

D. Retain for easy reference the advertising and catalogs used as a basis of the salesman's war-

E. If the supplier uses printed forms containing any limitation of warranty, make certain that any warranty relied upon by the buyer is in writing, signed by the sales manager or other authorized executive agent of the seller.

how much too much are you paying for Kraft Paper?



You use kraft paper by the yard...
you pay for it by the pound.

Once you have established the basis weight of kraft that best does your job—insist that you get it. Every pound of excess weight is many yards less wrapping footage for your purchasing dollar.

Crossett Leatherneck wrapping is carefully weight controlled to give you full value. The weight you order is the weight you get—and you get it when you need it.

Each of the authorized distributors listed has reserved machine time at the Crossett Mill to assure you of steady supply in all markets.

Ask your Crossett distributor for the full "money's worth" story of Crossett Leatherneck Kraft.



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ALEXANDRIA, LA Bancroft Paper Co.
APPLETON, WISC. Universal Paper Co. ATLANTA, GA. Dillard Paper Co. AUSTIN, TEX. Lone Star Paper Co. BALTIMORE MD. Hubbs & Corning Co. BATON ROUGE, LA. Bancroff Paper Co. Louisiana Paper Co.
ATLANTA, GA. Dillard Paper Co.
BALTIMORE MD. Hubbs & Corning Co.
BATON ROUGE, LA Bancroft Paper Co.
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CHICAGO III. Abana Products Inc.
Berkshire Papers, Inc.
Bermingham & Prosser Co. Chicago Paper Co.
Chicago Paper Co. Inlander-Staindler Paper Co. Kraft Paper Sales Co.
Montrose Paper Mills
Reliable Paper Co. P.Icher-Hamilton Co.
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Cinti. Cordare & Paper Co. Diem & Wing Paper Co. Merchants Paper Co.
CLEVELAND, O. Alling & Cory Co. Gascon Paper Co. The Union Paper & Twine Co. COLUMBUS, O. Central Ohio Paper Co.
The Union Paper & Twine Co.
COLUMBUS, O Central Ohio Paper Co.
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Oklahoma Paper Co.
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WASHINGTON, D. C R. P. Andrews Paper Co.
WICHITA, KANSAS Southwest Paper Co. WICHITA FALL, TEX. Empire Paper Co.
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Send your inquiries to:

WAYNE WIRE CLOTH PRODUCTS, INC. Kalkaska, Michigan

For More Information Write No. 229 on Inquiry Card-Page 32

News

Instrument Show in Phila. This Month

"How to Buy Instruments and Automatic Controls"-a session of special interest to purchasing agents—will be held during the 13th annual Instrument-Automation Conference and Exhibit, September 14-19 at the Convention Hall in Philadelphia.

This session, to be held September 14 at the Sheraton Hotel, has been planned, according to Dr. Robert Jeffries, president of the Instrument Society of America, to "further professional ethics of buying and selling instrumentation, and to establish a meeting ground and a common language between the manufacturer and the user." Dr. Jeffries pointed out that the group will recommend to the ISA for study certain methods of promoting better practices in buying and selling this equipment.

Electric HAND and HAIR Dryers



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Contract Work • Used Equipment For Sale • Business Opportunities

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PURCHASING

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Undisplayed (set solid)90¢ line

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WANTED LATE TYPE-MODERN

SURPLUS-DORMANT MOTORS-ELEC. EQUIPMENT O/E/T/ CRANES-ETC.

Foundry & Industrial Eqpt. Co. 162 N. Clinton St., Chicago 6

WE'RE LOOKING TO BUY!!!

- INVENTORIES OF DISCONTINUED OR OFF SEASON LINES
- MACHINERY
 PRODUCTION & SPECIAL BUILT
- RAW MATERIALS EQUIPMENT PACKAGING SUPPLIES •

USED IN ALL INDUSTRIES

NOTE: - Our buying range is so varied that is is impossible to describe the many items we buy - we will make you a worth while offer for ANYTHING

NATIONAL TRADING CO., 202 CAMDEN ST., NEWARK 3, N. J.

Suppliers

Aeroquip's Jackson Division has announced the appointment of Fred W. Schwier as general sales manager. Mr. Schwier was

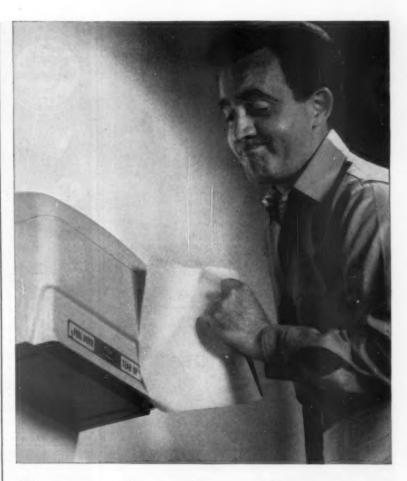


Fred W. Schwier

most recently assistant aircraft sales manager, and has been associated with Aeroquip Corporation in a sales capacity since joining the company in 1951. Included in Mr. Schwier's responsibilities will be the trade sales of tubing components and other products of Aeroquip's Elbeeco Division, also in Jackson.

American Potash & Chemical Corporation has named John A. Haynes sales manager for the company's National Northern Division at West Hanover, Mass. Mr. Haynes formerly was western area manager for Winchester-Western Division, Olin-Matheison Chemical Corporation for four years. Previously he was with The Skil Corporation for seven years in Los Angeles. As sales manager for AP&CC's National Northern Division, Mr. Haynes will handle such products as igniters, propellants, squibs, flares, detonators, pyrotechnics and related materials for the military services and commercial customers.

FOR MORE INFORMATION
USE INQUIRY CARD
PAGE 32



Picture of worker saving money

He's helping cut waste 20% with Steiner roll towels

Paper towel expenses getting high? You can cut towel waste with a Steiner controlled roll paper towel dispenser. Here's how: User pulls from the cabinet only the amount of toweling he needs . . . no grabbing of a handful of towels that aren't needed, half used and then discarded. Still, user gets plenty of towels for thorough drying job. You can save $20\,\%$ or more in towel costs with Steiner controlled dispensers.

Install them on a trial basis and see how you save. For more information contact your janitorial supplier or sanitary paper distributor or write Steiner Company, 740 Rush Street, Chicago 11, Illinois.



STEINER	COMPANY
---------	---------

740 RUSH STREET, CHICAGO 11, ILL., DEPT. 9C-1

Please send me free bulletins on Steiner controlled roll paper towel

AME____

COMPANY

STREET

ZONE_STATE

For More Information Write No. 231 on Inquiry Card-Page 32



the savings



add up



when you use



of Burlington's nylon fabric

By test, nylon has a longer life than any other kind of typewriter ribbon. This long life cuts down on replacements, adds up to savings, gives you clean type impressions that make the right impression for your company. Next time you order, specify nylon in your favorite ribbon brand. There are a variety of constructions from which to choose...each designed to do a specific job.

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MARSH Needle Valves

MAXIMUM WORKING PRESSURE

... for finer regulation of water, oil or gas

First needle valve to combine all the characteristics called for in modern industry. Embodies sturdiest basic construction—machined from solid bar stock—suitable for pressures to 10,000 psi and equally efficient in lower range. Note



stem guide fused to body by new "Conoweld" process, eliminating faults of conventional two-piece valves. Stem 416 stainless steel. Stem threads fine pitch for strength and micrometer regulation. Body electrozinc plated. Sizes 1/8" to 1", globe and angle patterns.

Ask for new Needle Valve Catalog

MARSN INSTRUMENT CO. Sales Affiliate of Jas. P. Marsh Corp. Opt. G., Skokie, III. Narsh Instrument & Valve Co. (Canada) Ltd., 8407 103rd Street, Edmenton, Alberta, Canada

For More Information Write No. 234 on Inquiry Card—Page 32
PURCHASING

POWERFUL NEW PLUNGER CLEARS

CLOGGED TOILET

in a jiffy!



Deuble-size cup, double-pressure

Tapered tail gives air-tight fit-Designed to flex at any angle

Centers itself, can't skid around

Clear messy, stuffed toilets Cut maintenance costs with

Toilet ALLANGLE Plunger

Ordinary plungers don't seat properly. They permit com-pressed air and water to splash back. Thus you not only have a mess, but you lose the very pressure you need to clear the obstruction.
With "TOILAFLEX", ex-

pressly designed for toilets, no air or water can escape. The full pressure plows through the clogging mass and swishes it down. Can't miss!

Get a "TOILAFLEX" for your home too. Positive insurance against stuffed toilet.

Fully Guaranteed

Order from your Supplier of Hardware or Janitor Supplies

THE STEVENS-BURT CO., NEW BRUNSWICK, N. J. A Division of The Water Master Company

For More Information Write No. 235 on Inquiry Card-Page 32

Lather . Fragrance . Safety

remium antiseptic liquid soap

Balmaseptic

For washroom and shower Contains Hexachlorophene

Clear, brilliant Balmaseptic rubs up quickly into handfuls of fragrant lather. Cleanses energetically, yet does not irritate the skin - does not chap. Regular use keeps the hands surgically clean: the HEXachlorophene puts the HEX on bacteria. Balmaseptic dispenses neatly - stores perfectly: does not turn cloudy or rancid, regardless of climate. Exceeds forthcoming U.S.P. Specifications

for Hexachlorophene liquid soap

For free sanitary survey of your premises ask your Dolge service man



For More Information Write No. 236 on Inquiry Card-Page

SANDSTEEL SPRINGS GREATER POWER MORE CONSTANT POWER For Many Applications

If you are looking for a power spring for any of dozens of applications, look to Sandsteel for your needs. Whether your application calls for the common spiral spring or the unique SANDSTEEL crosscurved spring for either stronger or more constant power, Sandsteel can solve your spring needs.

In its more than 30 years' history, Sandsteel has developed many tools and dies that are adaptable to various types of power spring manufacturing.

The presence of this equipment cuts down the tooling costs to the customer when Sandsteel handles the job.

When spring performance is important, specify Sandsteel.



If your spring requirements are for any of the applications listed below, or similar applications, call on

Doors Lamps

Spiral

Spring

CAMERAS

Mainsprings Shutter Springs ELECTRICAL

INSTRUMENTS Gyroscopic Controls Meters **Potentiometers**

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SANDVIK STEEL, INC.

Sandsteel Spring Division Fair Lawn, New Jersey SWarthmore 7-6200 In New York: Algonquin 5-2200

spring in

For More Information Write No. 237 on Inquiry Card-Page 32

Employment Service

Value Analyst

One of nation's largest manufacturers of controls needs young executive qualified to assume responsible staff position, with maximum advancement possibilities. Position requires E.E. or A.E. basic education with experience in purchasing or sales desirable. Analyst will offer consultative staff assistance to buyers in technical areas, recommend and coordinate with engineering, design changes resulting in cost reduction, improved reliability or purchasing of standard components. Age—30 to 38 years; salary—\$7,000 to \$9,000. Inquiries strictly confidential. Send resumes or detailed letter to:

Write Box 502.

Experience: Over 5 years as assistant purchasing agent heavy wheel type equipment manufacturer. Supervised all buying of components used for tractor units, transmissions, power units and ordnance contracts. Experienced in buying steel, forgings, castings, stampings, weldments, screw machine, hardware, tires, engines, batteries etc. Supervised follow-up, expediting and invoice costing.

Education: College—2 years—Business Administration.

Will relocate. Write: Box 178.

Experience: Eight years of purchasing experience; mechanical and electronic. Responsible for negotiation and procurement of specially designed communications equipment. Engaged in value analysis program. Familiar with all phases of purchasing function.

Education: BRA in Business Manager.

Education: BBA in Business Manage-

Write: Box 179.

Experience: Nine years diversified experience in metal manufacturing field. Eight years with one company. Purchased structural steel, ferrous and non-ferrous metals in all shapes and sizes, components, maintenance and shop supplies, tools, machinery construction equipment and sub-contracting. Set up inventory and purchase control systems.

Education: College—21/2 yrs; Physics

Prefer New York City area.

Write: Box 180.

Experience: Ten years purchasing agent and head of department, large Ohio company. Purchased chemicals, dyes, imported gums, zinc oxide, titanium, glue, containers, 15,000 tons paperboard annually, maintenance and machine shop supplies. 17 years accountant and general manager class 1 common carrier. Only two positions in 27 years.

Education: Majored in accounting and business adminstration. Studied traffic management.

Will relocate. Write: Box 182.

Experience: Twelve years experience purchasing, material control and traffic control in food industry and in west coast ordnance facility until plant closed.

Education: Courses in traffic menagement; supervisory training; conference techniques; business law.

Will relocate: Write: Box 183.

Experience: Purchased requirements in mining, smelting, refining, and construction; domestic and export. Manufacturing and research for aircraft and electronics.

Education: B.S. Write: Box 184.

Experience: Twenty-five years experience in directing the activities of purchasing, receiving, stores and material handling in the printing and metal processing industries.

Education: College-Business Administration.

Will relocate: Write: Box 195.

Listings in this department are offered without charge. Both purchasing department personnel interested in changing jobs and employers in search of replacements or additions to their departments may take advantage of this service. When writing, specify whether you want the applicant's form or the employer's form. Address all correspondence to Employment Service Department, PURCHASING Magazine, 205 East 42nd Street, New York 17, New York.

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Experience: Buyer (young man) in 1 man department of a technical society; 5 years experience in purchasing office, maintenance and shipping supplies; also responsible for inventory control & maintenance of stockroom; seek challenging opportunity in competitive company located outside New York City, preferably one in the Pacific coast area.

Education: BBA Degree; Management major, also had courses in accounting, marketing and economics.

Write: Box 185.

Experience: Seven years diversified experience which includes four years as Asst. Purchasing Agent in centralized department servicing six plants. Duties include buying all chemical supplies for production and research, packaging material, plant maintenance equipment and supplies.

Education: B.S. in management and Accounting.

Will relocate. Write Box 186.

Experience: 22 years purchasing. Member PAANY & NAPA. Latter experience, electronic, with broadcasting tape recording, distributing and aviation companies, including handling Air Force contracts. Prior experience: purchasing office & bldg maintenance equipment & institutional and hospital supplies. Have designed purchasing & inventory forms. Desire job Metropolitan NY area in salary range \$6-8,000. Education: College graduate with supplementary BA & purchasing training. Write: Box 187.

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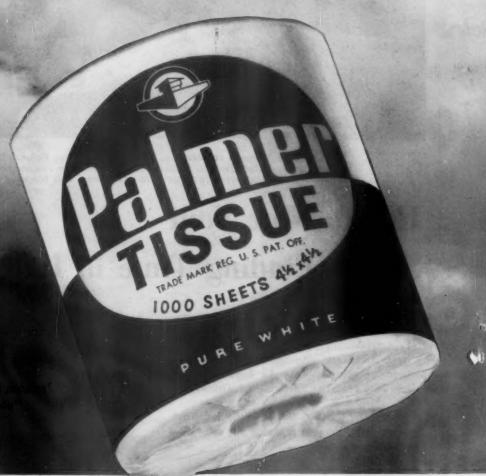




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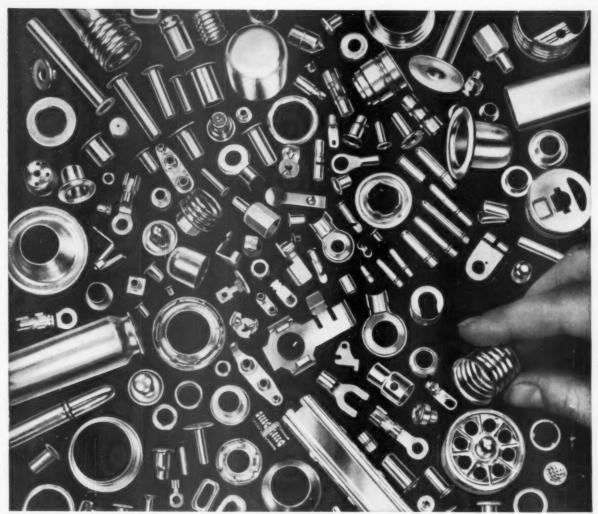


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